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North Panjab Fishing Club

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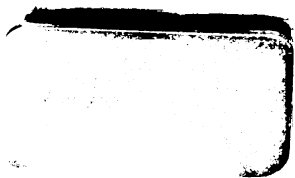
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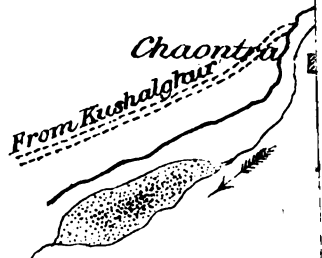
ANGLER'S
HANDBOOK

THIRD EDITION - REVISED

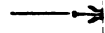


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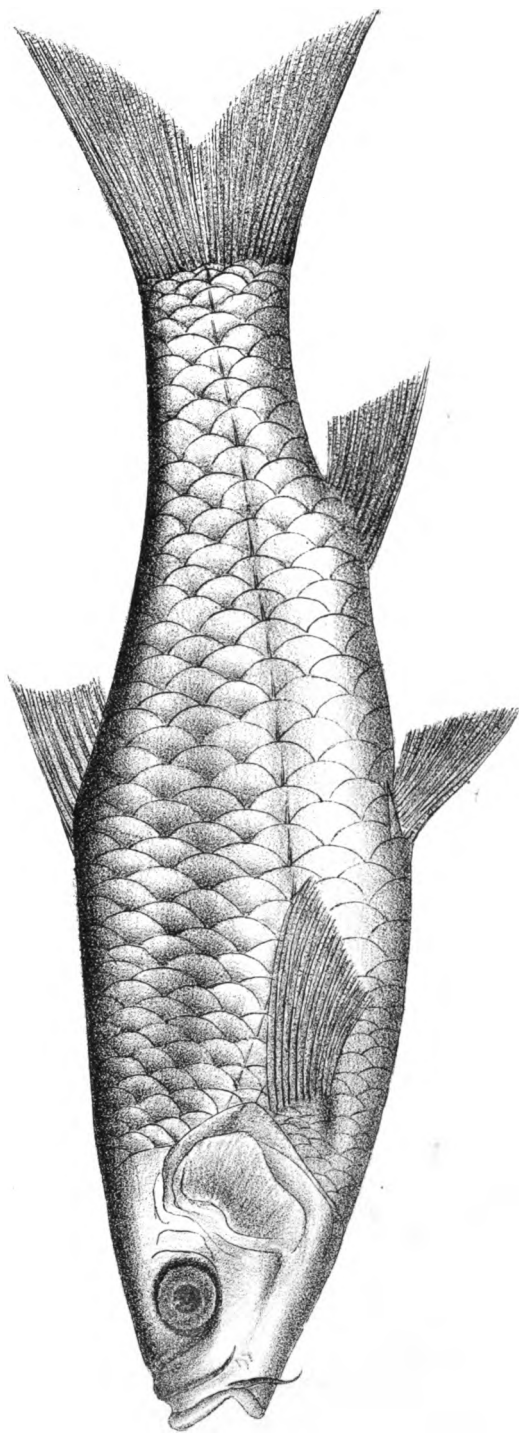




NORTH PUNJA



THE NORTH PUNJAB FISHING CLUB
ANGLERS' HANDBOOK.



MAHSER.—*BARBUS TOR*.

Lith & Printed by W Newman & Co., Calcutta

NORTH PUNJAB FISHING CLUB

ANGLERS' HANDBOOK,

COMPILED BY

THE LATE

G. H. LACY,

BENGAL STAFF CORPS,

Honorary Secretary, North Punjab Fishing Club.

THOROUGHLY REVISED AND CORRECTED UP TO DATE, WITH SEVERAL
NEW CHAPTERS AND ADDITIONAL INFORMATION

BY

DR. E. CRETIN,

Bengal Medical Service.

THIRD EDITION,

Calcutta:

W. NEWMAN & CO., 4, DALHOUSIE SQUARE.

1895.

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PREFACE TO THE FIRST EDITION.

AT the suggestion of Major-General H. C. Wilkinson, c. B., late President of the Club, and of several Members, I have undertaken to compile this work.

The first three Chapters treat generally on the requirements of an Angler in this country, and particularly in the Punjab; and have been so arranged as to include all the subjects on which, in my capacity as Secretary of the Fishing Club, I have been asked information, or particulars about, by Members commencing a fishing career in India. Part II has been compiled from notes furnished by Members regarding most of the fishing localities in the Punjab, and also about others in the North-West and elsewhere, and which gives a lot of useful particulars and information.

The compiler trusts that Part I may be found useful by beginners, and that Part II may prove useful to older and experienced Anglers as well, who, perhaps, on being transferred from one station to another, may find angling localities mentioned in this Hand-book of which they were, perhaps, previously unaware, or regarding which they did not know the full particulars—as to the Routes, Baits, Accommodation, &c.,—and also that it may be useful to those making arrangements to visit any particular rivers or fishing localities mentioned herein.

I would beg to tender my best thanks to those who have so kindly contributed to this work. No literary merit is claimed for the same, it being merely a collection of rough Notes, Letters, and Diaries, arranged in a readable form, and such information as has been derived from experience, gained while fishing in this country. It may be mentioned

that the "Anglers' Map" has been taken from the several sheets of the Atlas of India. It is, however, although generally speaking, fairly accurate enough for general purposes, intended chiefly to give an idea of the river system of the Northern Punjab, Kashmir and Jummoo, and to show the relative positions of the different fishing localities resorted to. A Skeleton Map cannot be much good, as regards making out Routes, etc., but such as it is, it is hoped that it may prove useful. The Atlas of India Sheets showing the country embraced in this Map are No. 14 S. E., No. 15 N. E., No. 28 S. W., and No. 29 N. W.

G. H. LACY,
Honorary Secretary,
North Punjab Fishing Club.

RAWULPINDI,
September 8th, 1887.

PREFACE TO THE SECOND EDITION.

IN offering a 2nd Edition of this little book to the public, I am encouraged in so doing, by the kind way in which the 1st Edition was received both by the Press and the angling community. The 1st Edition was naturally far from perfect. I may say that it was brought out under great pressure, both on my part and also on that of the publishers, to satisfy the ever-increasing applications for information regarding particular fishing localities, by Members of the Fishing Club and others, of which perhaps they knew little, or had only heard spoken of or talked about. Consequently omissions were made, and errors crept in, such as misprints, etc., which it is hoped have all been removed in the 2nd Edition.

Through the kindness of Members of the Club, as well as others, to whom my best thanks are due, I have been enabled to considerably enlarge this work. Each heading has been more fully discussed, or amplified, and additional information, the result of further experience on the part of others as well as myself, has been embodied.

On bringing out the 1st Edition, I was remonstrated with by several "selfish brethren of the angle" for having disclosed their pet spots. I trust they will forgive me! My object is to try and put all in the way of obtaining fishing; and in India, we should all do what we can to help a brother angler, or put a beginner in the way of obtaining what the writer of Chapter V of this book so truly calls "the kingly sport."

If I have so done, and converted a few disciples, perhaps from spending their leisure and their leave amidst the

aimless monotony of hill-station life, to the jungle and riverside, I shall feel happy, even though I may have had the misfortune to have incurred the odium of disparagement, at the hands of those whose pet spots I may have laid open and disclosed.

I consider that fishing in India is so uncertain, and that there is such a large extent of water open to the angler, that it is quite different from shooting, and I should be the very last to make public good shooting localities, which now unfortunately are so few and far between !

I would furthermore ask my readers to remember that the object of this book is to give the beginner a choice of the various descriptions of tackle to pick and choose from, although at the same time those that I have found best are recommended. It is not intended to uphold any one description of tackle as absolutely better than all others. Among fishermen there are *tot homines quot sententiæ*, and one man kills his fish with a dodge, that another equally successful would never dream of using.

G. H. LACY,

*Honorary Secretary,
North Punjab Fishing Club.*

RAWULPINDI, }
August 15th, 1889. }

PREFACE TO THE THIRD EDITION.

AFTER the death of Captain G. H. Lacy, Messrs. W. Newman and Co. bought the copyright of the North Punjab Fishing Club Anglers' Handbook. Captain Lacy was such a good sportsman that his ideas on fishing deserve to be put on permanent record. In this third Edition, I have prefixed his name to the chapters written by him, I have made only a few insignificant corrections from a natural history point of view in his text. A supplementary chapter on Fishing Tackle has been added, and a list of the commoner fishes likely to be met with by the fisherman. The letters on localities have been rearranged, and a few more added. This handbook gives fishing localities in Northern India. Thomas' books should be referred to for localities in the Dekhan. His two books on fishing should be in the hands of every fisherman, as they are charming master-pieces.

There is no description of Sea-fishing in this work, such as can be got at the Andamans, for instance. For that purpose, the following books are useful:—

Angling in Salt Water by Bickerdyke.

The Sea and the Rod by Paske and Aflalo.

I am told that big Mahseer have been caught at the Asan-Jumna Junction in very muddy water by spinning a dead bait. Fisherman might give the plan a trial in other places.

The North Punjab Fishing Club died a natural death after the departure of Captain Lacy from Rawal Pindi. They are trying to start another Club there.

It would be a great boon to fisherman, if a Tangrôt Club could be formed for the preservation of the Poonch and its

tributaries. In 1886, the destruction of fish by dynamite in the rivers of Kashmir was forbidden, at the request of the President of the North Punjab Fishing Club. In 1887, a letter from the President of the same Club, recommending certain measures for the preservation of fish, was sent by the Resident in Kashmir to the Rajah of Poonch, for favour of his issuing instructions to the officials of his State in terms of the suggestions made. Boards were put up in the Tangrôt Dāk Bungalow containing orders from the Kashmir Darbar for restricting destruction of fish. But the orders were never strictly carried out, and soon fell into abeyance. In 1895, I wrote to the Resident, and, as a result of the correspondence, the present Rajah of Poonch has promised to revive the orders issued by his father, and to make them more effective. I would suggest that gentlemen fishing on the Poonch, should they witness any wanton destruction of fish, should communicate the facts to the undersigned, in order that action might be taken, if possible. Any letters addressed to E. Cretin, Care of King, Hamilton and Co., Calcutta, will find me.

The tributaries of the Poonch, which are breeding grounds of Mahseer, require protection more than the Poonch itself. Weirs, cruives, fixed gins for catching fry should be put a stop to; when necessary, the villagers can be compensated for any loss of rights. The use of poison and of dynamite for the destruction of fish should be absolutely forbidden. Netting might be restricted in the Poonch. For instance, all scaly fishes might be returned to the water, which would include Mahseer; scaleless fishes might be taken away. Should the balance of Nature become disturbed, and any particular kind of fish increase enormously to the detriment of the Mahseer, the matter could be dealt with subsequently. Some system of supervision would be required to ensure the efficient carrying out of any orders that might be issued. Water bailiffs, in the shape of Chowkidars or Chaprassis, would

have to be paid for. Much more trustworthy would be the testimony of fishermen going to the Poonch. The Giri river has been preserved by the Sirmoor Fishing Club, and the result has been highly satisfactory.

Every fisherman in India should contribute towards the preservation of good-fishing rivers like the Poonch and the Giri.

Government had in hand a Fisheries Bill, which might have done something for sport, directly or indirectly ; but the Bill has been pigeon-holed. English trout has been imported successfully in Ceylon. They are trying to import eggs from England for the purpose of stocking the streams about Abbotabad. We wish them success.

INDIA,
August, 1895.

E. CRETIN,
*Surgeon-Major,
Bengal Medical Service.*

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Page	3, line 17, <i>for</i> 3 x 9 <i>read</i> 3 + 9.
„ 74, „ 16, „	Ledgering <i>read</i> “ Legering.”
„ 132, „ 13, „	Megolops „ “ Megalops.”
„ 138, „ 30, „	Admatus „ “ Armatus.”
„ 243, „ 2, „	Sriyaliks „ “ Siwaliks.”
„ 261, „ 2, <i>put</i>	a semi-colon <i>after</i> the word “ inch.”
„ 261 „ 23, „	a colon <i>after</i> the word “ is.”
„ 263, „ 15, <i>add</i>	“ road ” <i>after</i> Nagpur.
„ 265, „ 22, <i>for</i>	inland <i>read</i> “ upland.”
„ 266, „ 3, <i>add</i>	“ Central India ” <i>after</i> Nowgong.

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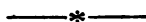
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THE NORTH PUNJAB FISHING CLUB ANGLERS' HANDBOOK.

PART I.

CHAPTER I.

Fishing tackle, outfit, etc., necessary for the fisherman in India, together with general notes on the same referring to fishing for the smaller Mahseer, by
G. H. LACY, Honorary Secretary, North Punjab Fishing Club.

FISHING in India, when generally spoken about, refers as a rule to the Mahseer, and it is about this fish that the following notes are intended to apply :—The Mahseer takes the lead among Indian fish much in the same way as—only in even perhaps a greater proportion than—the Salmon does in Great Britain.

As most of my readers will be aware, the Mahseer is a fish of the carp species. Its scientific name is *Barbus Tor*, and it is known to the natives of India as *Mahseer*. As to the derivation of this name I am somewhat uncertain ; It may be from *Maha* “great,” and *Sir* “head,” or it may be *Maha* “great,” and *Sher* “Tiger.” Most probably I fancy the former. Although generally known as Mahseer throughout the country, in certain localities it is called by other names. It is known to the Jhelum fishermen as *Kakur* and *Sakhral*, and lower down country as the *Chandni Matchli*, and doubtless different districts give it different names. There are two or three kinds of Mahseer differing in colour, but in the Punjab I have never seen any but the ordinary kind, although in Central India I have met with a very dark variety, which is known locally as the *Kala Mahseer*. The Mahseer is generally distributed throughout India from the Kabul River to Assam, in Central India and Madras. It is not

my present intention to go into the natural history of this fish, but only to give a few notes about it that may be useful. It runs to an enormous size, 150 lbs. or more ; but the majority of fish that the angler has to do with, do not exceed 40 lbs. ; and these even are very exceptional, the majority of fishermen being content with fish up to 10 lbs., and even far below this weight.

[The Mahseer, *Barbus Tor*, is a fish of the Carp family, and belongs to the same genus as the English Barbel. The peculiarity of the Carp family is that it has teeth in the throat, but none in the mouth. The Mahseer has got very big scales, a big head and a big mouth. The lips are thick and coarse. It has four barbels—2 thick ones at the corners of the mouth and 2 smaller ones on the snout. There is a strong, sharp, bony ray in the back fin. Its fins are powerful and account for its first, grand rush. There is only one species of Mahseer, with several varieties. The colour varies. Usually it is silvery shot with gold when alive, becoming leaden blue when dead. The fins are reddish yellow. It is found generally throughout India, but it affects mountain streams and rocky rapids. The natives call the big specimens Mahseer, the small ones being often called by some local name. The derivation of Mahseer from maha sir—big head—may be merely an attempt to give a meaning to the word. The derivation from maha sher—big tiger—is fanciful, although the natives sometimes pronounce the word Mahsher ; it is merely the soft equivalent of the word. A third and a good derivation is from Māhāsaula, Mahasālka—big scaled. The natives often call the fish Māhsōl. The Mahseer has got bigger scales than any other freshwater fish in India. Its big scales form one of its best distinctive characters. A big Mahseer has got scales as big as the palm of one's hand which make the use of the gaff unsafe. The scales are used as playing cards in some parts of India. A fourth and a likely derivation is from Matsya, which is the Sanskrit word for " fish," and is used in the Vedas. As the Mahseer is a sacred fish, preserved near many Hindu temples, it is probable that the Brahmans called it " Fish " par excellence, pronouncing the word Māhsia. The following are some of its

native names : *Hindustani*—Mahasir ; *Hindi*—Naharm ; *Panjabi*—Kākhiah ; *Marathi*—Kadchi, Masta ; *Sindhi*—Jūngah, Petiah, Kārriah ; *Assamese*—Barapetiah, Barapatra, Jhāngāh ; *Tamil*—Bōmmin, Pūmin, Kendai ; *Canarese*—Peruval ; *Mysore*—Hallā-mim ; *Malayalim*—Merūvāl ; *Tulu*—Heragulu ; *Ceylonese*—Kūviah, Lela. The Mahseer is the biggest Carp in the world. It runs to 200 lbs. and $5\frac{1}{2}$ feet. Sanderson in his "Thirteen years among the wild beasts of India" describes and figures a monster Mahseer he caught with a night line in the Caveri river. I saw a similar Mahseer caught with a net in the Gogra at Faizabad. The length of each of those fish was about equal to the height of a man, say, 5 feet 6 inches. Sanderson underestimated his at 150 lbs., the other one was estimated at 100 seers. The late Captain Lacy caught a female Mahseer at Tangrot, 61 lbs. in weight, 4 feet 7 inches in length, and $2\frac{1}{2}$ feet in girth.

The following is Day's definition of the Mahseer : 3 gillrays, 12 (3×9) rays in the back fin, 19 in the breast fin, 9 in belly fin, 7 or 8 in anal fin ; 25 to 27 scales in lateral line, 4×4 rows between back fin and belly fin.

Length of head 4 to 5, height of body $4\frac{1}{2}$ to $5\frac{1}{2}$ in the total length of the body. Eyes ; diameter $6\frac{1}{4}$ to $7\frac{1}{2}$ in the length of the head in moderately sized specimens, but much larger in the young (in specimens 3.5 inches long being $3\frac{1}{2}$ in the length of the head ; in those 5 inches long $4\frac{1}{2}$), 2 to $2\frac{1}{4}$ diameters from the end of snout, and 2 apart. Lips thick, with an uninterrupted fold across the lower jaw, and with both the upper and lower lips in some specimens produced in the mesial line. Barbels : four, the ones near the corners of the mouth longer than those on the snout, and extending to below the last third of the eye. Fins : the back fin arises opposite the belly fin, and is three-fourths as high as the body ; its last undivided ray is smooth, bony, strong, and of varying length and thickness. Himalayan, Bengal, and Central Indian specimens generally have the spine strong, and from one-half to two-thirds the length of the head, it rarely exceeds this extent. In Canara, Malabar and Southern India, where the lips are

largely developed, the spine is very much stronger and as long as the head excluding the snout; breast fin as long as the head excluding the snout; it reaches the belly fin, which is little shorter. Anal laid flat does not reach the base of the tail fin, which is deeply forked. Lateral line complete, 2 to $2\frac{1}{2}$ rows of scales between it and the base of the belly fin; 9 rows before the back fin. Colour: silvery or greenish above, becoming silvery shot with gold on the sides and below. Lower fins reddish yellow.—*Cretin.*]

The Mahseer has many peculiarities. The mouth itself has no teeth, but there are most formidable ones in the throat lower down. The Mahseer has, however, most extraordinary powers of compression, and I have several times seen stout triangles crunched up, and once or twice I have seen spoons similarly served, none of which could have been possibly taken far enough down into the mouth to have come under the terrible force of the teeth, and the damage inflicted must have been done by the mouth alone, at least, so far as could be ascertained at the time. The Mahseer has, however, a habit of trying to rid himself of spoons and triangles hanging outside his mouth, as they usually are, rubbing them against stones and rocks, and perhaps some of the damage recorded above may have been caused in this way. One of the cases in point of a spoon being crunched was as follows: A friend with whom I was fishing hooked and landed a 23-pounder. The spoon, which was four inches in length, was only taken between the fish's lips, and it was not even taken edgeways, but perfectly flat into the mouth; the force of the blow was so enormous that the spoon was bent or dented in; and it was made of thick metal too! The blow could only have been given by the lips, and the spoon could not possibly have been taken right into the mouth of the fish. Again, I had a spoon taken into a Mahseer's mouth edgeways. It was a $1\frac{1}{2}$ -inch spoon, and the split ring of the tail triangle was cut clean out of the spoon, and a hole had been punched clean through the spoon by one of the triangles having been pressed on to it by the fish's mouth.

To prove that Mahseer get rid of spoons and triangles hanging outside the mouth or head, by rubbing them against stones, I may quote here the following story:—In September, 1887, I was fishing in company with a friend, and in the morning lost a good fish, certainly a 20-pounder, on a small spoon, by the single gut trace breaking in the first rush. At dinner that evening four of us were assembled, and after dinner each of us, as was the custom, produced our tackle boxes and commenced a lively discussion on the merits and demerits of our several kinds of tackle.

Imagine my astonishment when I saw my friend across the table produce from his box, the very spoon on which I had lost my 20-pounder only that morning! On inquiry being made, it appeared that his boatman saw something shining at the bottom of the water, and getting it out, put it into his Sahib's box without informing him about it. He found the spoon thirty yards from where I hooked the fish. Now, here is a clear case in point of the fish probably rubbing away at his nose or mouth, until he had got free from the painful encumbrance. It was also extraordinary that this spoon should have turned up, as it did, in my friend's tackle box the very same evening! The teeth of a large Mahseer, say of over 30 lbs. or so, are well worth keeping as trophies, or mementoes of any very exciting struggle. Their construction is peculiar, as the teeth and the jaw are all in one piece, and each tooth does not have a separate socket, as is the case with animals, and I believe with most fish. The jaws are right down in the throat, and work one against each other, much in the same way as a butterfly clap net does.

The teeth are most formidable, and I have even heard of a native having the top of his finger crunched up by them, he having incautiously shoved his fingers right into the gills when landing a fish.

The mouth is so made, in that it is most favorable in giving a splendid hook hold, and large fish are often caught by a single hook holding in the merest shred of skin which in any other kind of fish would assuredly have broken away.

It is a much vexed question as to when and how Mahseer spawn? It is however, I think, now generally believed that they spawn at uncertain times, but that the majority of them do so between May and September. This point, however, does not appear to be in any way settled, and doubtless they spawn at different seasons in different localities, and under different conditions. Moreover, it also appears that they spawn by degrees, and not all at once, and this fact makes it more difficult to ascertain the exact period. It is also thought by some that the larger Mahseer spawn chiefly in December and January, but this is improbable. One thing however appears certain, and that is that the Mahseer is scarcely ever found in a foul or gravid condition, the same as a spawning Trout or Pike is in England. Occasionally one catches a lanky and lean fish, and which condition may have been brought on by spawning, but even this is as a rule doubtful.

I consider that we are at present quite in the dark as to the spawning habits of the Mahseer, and it is a subject to which every angler should devote his attention, and do his utmost to throw some light upon the matter. Referring to my own notes made since the 1st edition of this book was published, I find that I have found female fish full of spawn in the following months :—a 36 lb. fish in April, several fish in May, but none over 5 lbs., as also in June, a fish of 3 lbs. in July, one of 20 lbs. in September, and one of 14 lbs. in October. Now, all these fish played well, and particularly so the 36-pounder, and one of 5 lbs. taken on fine trout gut. This, therefore, overthrows the idea that spawning Mahseer are out of condition and lazy and unable to give sport, which is the case with, I may say, all the fresh-water fishes found in England. Another interesting question is, whether Mahseer can only produce fish from their spawn of a relative size, *i.e.*, similar to their own? For instance, can a 60 lb. Mahseer be developed from the spawn of a 5 lb. Mahseer? Do the fish produced from the spawn of a 60-pounder grow more rapidly to a large size than those produced from the spawn of a smaller fish? Of all these questions

anglers are, to a great extent, ignorant! Another question—In a rocky water-course at an elevation of 5,000 feet above the sea, and having a fall of 30 feet in every 100 feet, in fact merely a rocky chasm down the side of a mountain, having only little pools of water every 30 yards or so, of only a foot deep and 4 or 5 feet in width, I have found young Mahseer. How did they get there? Or rather how did the spawn from which they were produced get there? No fish could have ever got up this inaccessible water-course, or, I may almost call it, precipice of boulders and rocks, which in one or two places formed a sheer drop, absolutely perpendicular, of 30 or 40 feet, and the fish were in the little pools *above* these impassable precipices! How these fish got there I cannot tell, nor was there any source of water supply above from which the fish or spawn could be washed down.

The above are a few of the most interesting questions on the subject, and year by year as one visits the riverside, one feels more and more how little he knows of the above subject.

If anyone cares to note in his angling diary the number of male and female fish he catches, respectively, he will find that the latter exceed the former by four to one.

The male fish can easily be distinguished by the swelling or fleshy protuberance on the nose being extended farther, and being more fully developed than in the female. The lips of the male fish are also much thicker and coarser than those in the female fish.

In all my own diaries, extending over the last few years, I find that the largest male fish that I have caught did not exceed 22lbs.; all over that size (about 60 or more) being female fish. This is very extraordinary, and I think I may say, although my memory is not quite clear on this point, that of all the large fish I have seen taken at Tangrot and elsewhere, only two or three were males. As regards their feeding propensities, it will be seen that they will take anything from live bait to paste, and are, to all intents and purposes, omnivorous. With all this, they are, however, very often the most provoking fish, going on

and off their feed with a caprice and uncertainty that cannot be accounted for. The young angler is often disappointed and put out, and resolves never to fish again; but by perseverance and waiting, a day will come which makes up for all the hard work and blank days that he has previously undergone. Anyone who has fished day after day for three weeks or a month will doubtless look back upon those "one or two good days" when the fish seemed to be almost trying to commit suicide, whereas on the very next day, although wind, water, and atmospheric conditions *seemed* the same, he could not touch a fish. Such is Mahseer fishing, and with such we must be content.

When the fish are on the feed, it is, indeed, glorious sport, and a "real good day," as before depicted, is one to be treasured in one's memory, and will be thought about for months after.

I do not wish to discourage the beginner, but to take an average all round, say, that out of ten days' steady fishing, taking seasons and rivers about, the angler will, as a rule, have five days blank, four days on which he will have, perhaps, moderately good sport, but the tenth will be the real good day, which should make up for all the rest. The above is an average, and such has been the writer's own experience.

There are, perhaps, few fish more truly handsome than a Mahseer when freshly taken from the water, and there are many points worth noticing. The peculiar line down each side of the body, the beautiful colouring of the scales and fins, the breadth of the tail, and the peculiar wattles on each side of the mouth are all points requiring attention; but what concerns us most at present are those peculiarities and habits which have to be understood and overcome with reference to making a successful bag, and being able to present the fish with a suitable bait, and upon tackle suited to the size of fish expected, and it is upon these points that I now purpose treating.

All over India, Mahseer fishing may be generally divided under, or classed into, two separate heads: (1) Heavy Mahseer fishing, for fish running from 15 to 60 lbs., and for which heavy rods, reels, and lines are required; and (2) fishing for smaller

fish, running from 1 to 15 lbs., and for which light tackle and rods suffice.

As the latter kind is that which the beginner in this country is most likely to try his hand at first, a general description of the tackle and outfit required for this will be first given.

The following is a list of the necessary tackle required for "light" Mahseer fishing :—

The Rod.—For light Mahseer fishing a 12 to 14 feet rod is recommended, or, what may be styled, a light double-handed fly rod. A rod of this kind is usually made in three or four joints, the former number being, I think, preferable. Whether it is furnished with upright or running rings is a matter of option, but personally I prefer the former. For any one requiring a light general rod, I cannot do better than recommend Messrs. Alcock & Co.'s "Standard" fly rod, obtainable from W. Locke & Co., Calcutta, for Rs. 25. It is made I think in two sizes, but the 14-feet rod is the one required for light fishing. I have never yet seen any one using the split cane rods now so much used at home, but if these would stand the climate nothing



could beat them. They are, however, expensive and if broken would be difficult to repair in India. All rods should be fitted with a steel cored revolving top ring, or with the kind known as the "Blackerdyke" rod top ring, an illustration of which is herewith given. It is procurable from Messrs. Warner and Sons, of Redditch. It will move in any direction, and adapt itself to whatever angle the line makes with the rod. Lockfast joints are a great boon, and those made by Messrs. Hardy Brothers, of Alnwick, are, perhaps, the best. A most excellent arrangement has been lately brought out in substitution of the old system winch fitting with two metal rings.

This is called the "Wegger" winch fitting, and is so made that it can be adjusted to any reel. The principle is as follows:—One end of the reel plate fits into a fixed clutch

or grip, another similar clutch is made, so that by a button screw it can be screwed up or down on a slide. When screwed up it grips the plate firmly, and the reel cannot possibly become loose or undone. A diagram of this is given on Plate No. VI at the end of the book.

The Reel.—For light fishing a 3 inch revolving plate bronzed check reel, is recommended, and which should be broad enough to hold 100 yards of fine silk line.

There are many kinds of patent reels offered to the public, and doubtless some are an improvement on the ordinary pattern; but here again comes the question of the difficulty in getting a complicated reel of delicate manufacture repaired in India without sending it to a regular tackle maker in Calcutta or elsewhere. Moscrop's patent reel is a good one, as also Malloch's reel, but, as before stated, I prefer the plain metal bronzed reel for light Mahseer fishing.

The Line.—From 60 to 80 yards of fine silk plaited line is recommended; the best procurable. I have generally found the above quantity sufficient, but it would be preferable to have 100 yards, which would be, in all probability, quite sufficient for a fish of 30 or 40 lbs., if the angler should be so fortunate as to hook one on his light tackle—often it will be found that the line at first cannot all be got on the reel, but by careful winding a lot of room is saved. It would be well if all reels had a small hole countersunk in the spindle so as to take in the knot, which is greatly the cause of irregular winding, and this would in no way weaken or reduce the strength of the reel. This hole would, of course, be larger in diameter than that through which the line passes, and would be about half the diameter of the spindle in depth.

Tussa silk, and other kinds of lines, are very good in their way, but are apt to kink, and do not last half the time a really good silk line does, and the very best quality of this is recommended as being the most economical in the end, and may, perhaps, save the angler much disappointment in the event of his hooking unexpectedly a heavy fish.

The great secret of keeping a line good, and in a strong condition, is to take great care that it is always dried after fishing, and occasionally taken off the reel and aired, particularly the end portion, which being seldom run off the reel is therefore more necessary to expose to the air. It is difficult, however, after fishing, particularly if one's pony or trap is waiting at the river bank and one's fishing is ended to do this; but if the last few yards of the line that may be wet are pulled off the reel, and wound round, even a broad piece of wood or card, to a certain extent they will be exposed to the air and become dry.

Traces.—For heavy Mahseer fishing there is much controversy about which are the best kind of traces—wire or gut—and if of wire, which kind is the best; but for fishing for smaller fish, it is, I think, universally admitted that single Salmon gut, or at the most, double gut, is the best thing to use. Many also are the arguments regarding the length of trace necessary, and likewise as to the number of swivels required. Traces of single Salmon gut, from two to three yards in length and with three swivels, are recommended.

Whether the gut should be white or dyed is a matter of opinion, but the writer has always found white gut to answer every purpose.

It is far more economical to buy one's gut and make the traces required, *i.e.*, single ones oneself; and, moreover, the trace can then be made of whatever length required, or according to fancy.

As a general rule, however, it may be said three yards is a suitable length for a single gut trace, with three single swivels. Double swivels (Pennell) are too heavy for single traces. The three swivels should be distributed one at each end of the trace, and one in the centre.

As regards making up traces oneself, several kinds of knots, suitable for joining the strands of gut together, will be found described in Chapter III.

Swivels.—All swivels should be well oiled before use; and, moreover, if when purchased, the swivels are submitted to the

following process, it will be found to be an immense improvement. These notes about swivels apply to all, both those used in heavy fishing and light. On purchase, many swivels will be found to be more or less rough and to revolve with difficulty. This can be remedied by the following process:—If the end or ring of the swivel is hooked on to a lathe or to the hook of a twisting machine, and revolved rapidly either way, oil and emery powder being added to the “body” of the swivel, it will be found that all imperfections of the surface will be worn away, and the swivel will revolve far better than before being subjected to this process. It will be found that two or three swivels, prepared after this fashion will work better than six in the rough, moreover, a great number of swivels distributed up and down the trace, make a great stir and show in the water, weaken the trace and cost money.

“Pennell” swivels, *i.e.*, two ordinary swivels with the rings or eyes let into each other,



as per marginal diagram, are too heavy for light traces,

and are not required for any kind of gut trace however thick, but they are useful in wire traces, as they prevent kinking to a certain extent. Which are the best—blued steel, aluminium, nickel-plated, or brass swivels?—is often a matter of argument among sportsmen, and certain advantages and disadvantages are held out against each. Blued steel swivels are very generally used, but are apt to rust and corrode and eat into the gut: nickel-plated are perhaps the best. Mr. T. P. Luscombe's remarks about swivels in Chapter II. are most useful, and apply to small as well as large swivels. For single gut traces, small swivels are all that are requisite, and one often sees traces of this description made up with unnecessarily large ones, which make a great splash when cast into the water. There are various kinds of “hook” or spring swivels, which are very convenient, as they allow the line or spoon to be attached without any knotting or trouble, but they are not, as a rule, very generally used, and are, moreover, not very reliable or to be depended

upon, although generally good enough for light fishing. They are, however, very convenient, and save a lot of trouble.

Leads—With light tackle, are generally quite unnecessary when fishing with a spoon, or in any other way. The subject of leads will be discussed farther on, when treating on the tackle required for “heavy” Mahseer fishing.

Spoons or other Baits, such as Phantoms, &c.—This subject may be discussed at considerable length. As a general rule, however, it may be laid down, that small spoons, from $\frac{1}{2}$ to 2 inches in length, are the most killing bait, and the most effective for Mahseer up to 12 or 15 lbs.

Beyond this size, larger and heavier spoons are required. Many are the shapes and kinds of spoons offered to the public, but a great variety is, I am sure, unnecessary; and if the fish are on the feed, they will rush at almost any kind of spoon that may be presented to them.

There is no doubt but that a small spoon should spin with a great rapidity, although this is, in my opinion, not so necessary with large spoons; and it has been found that the “hog-backed” spoon spins far and away faster and truer than the ordinary spoon of the usual shape. Spoons may be “hogged” to any degree, but the “half” or partially “hogged” spoon is, perhaps, the best of all.

Whether the spoon is silver and gold (or brass) or silver, or gold, is a matter of opinion, but, as a general rule, silver and gold is that generally used, and it is the most effective. The all-gold spoons are also very good, but the all-silver spoons are, as a rule, only killing when the water is colored or dirty. Another rule that is not often attended to, which often ensures success, is the following:—

Spoons should not be *too* bright in very clear water. One often sees a highly polished and gilt spoon used by an angler in water as clear as glass without success, and I am sure that an excessively bright spoon, although good enough in colored water, frightens away more fish than it catches in very clear water. Spoons should be moderated in brightness according to the state

of the water. In dirty or coloured water, however, the spoon cannot be too bright or flashing, the more so the better.

There are many opinions as to the best shape for spoons, but there is little doubt but that an elongated pear-shaped spoon spins more evenly and truer, whether it is hogged or not. One of the best pattern spoons for the smaller Mahseer of the Punjab rivers is, I think, what is usually called "Scott's" No. 2, and it is sold by Messrs. Scott & Co., of Rawul Pindi and Murree, a diagram of which is shown on Plate I, containing the diagrams of the several kinds of spoons referred to and recommended. Messrs. Scott & Co. also have similar pattern spoons, *viz.*, Nos. 3 and 4, that are, perhaps, even better than their No. 2 spoon, and are slightly larger and heavier. Some prefer spoons of a broader and more triangular pattern than the above, and of this kind, those made by Mr. T. P. Luscombe are the best. These are very good, but it is quite a matter of opinion, and anglers generally fancy the pattern spoon that they have, as a rule, been most successful with at first. The triangular-shaped spoon spins doubtless faster, but on account of its breadth and shape it cannot be so like a fish as the elongated pear-shaped spoon. For purposes of economy it is not difficult to get spoons made up by bazaar mistries from patterns given them, and for all general purposes they are good enough, although, perhaps, a bit rough. Any kind or shape of spoon can be made up for one to six annas; not including silvering or gilding. These spoons should be of brass or copper, the former being, perhaps, best. I always silver these spoons myself, and after having tried many kinds of silvering fluids, have come to the conclusion that Walton's "Argentine" is the best. The price of a bottle is about one rupee, and it is usually sold by Chemists in India. A bottle contains enough of the preparation to silver five hundred spoons, if not more, and as the stuff dries up, by mixing water in the bottle, it can be dissolved and produced afresh. I have also found the ordinary "kalai" used for tinning "degchies" an excellent substitute for silver, if the latter cannot be obtained. On Plate I

are shown several diagrams of various kinds of spoons recommended, both for "heavy" and "light" Mahseer fishing.

I now come to the most important matter, *viz.*, the way spoons should be mounted in order to be used with the most deadly effect, and on this subject there is much controversy and many different opinions. For my own part, I have no hesitation in saying that I think all spoons under 2 inches in length should be mounted with what is called a "flying mount," diagrams of which are given on Plate II, and that all spoons of a greater length than 2 inches or thereabouts, should be mounted with the ordinary "head" and "tail" triangles, *viz.*, one ringed triangle at each end. It is of the first description of spoon that I will now treat about, *viz.*, those under 2 inches in length, and for which I have stated that a flying mount is most strongly recommended.

Before proceeding farther on this subject, I would briefly refer to one or two comments made in the Reviews of the 1st Edition of this book regarding my opinion against mounting spoons of large size with a "flying mount." With reference to this, I may state that I am myself still of the same opinion, except that I have here stated that the length of spoon for which I consider a "flying mount" to be advantageous, is 2 inches instead of $1\frac{1}{2}$ inches. All these things are matters of opinion, and I am always open to conviction! With large spoons I have been rather unsuccessful with "flying mounts," as compared to the old method of fixed triangles, but this may be bad luck. I have also found that a big "flying mount" is a nuisance, it kinks, and gets caught up in the line, and I have most certainly found that I lose more fish slightly hooked in this way, than with the "head" and "tail" triangles. I daresay all this depends a great deal on the kind of river one is fishing. Fish everywhere vary in their habits, and in certain places, as at Tangrot, for instance, they take a spoon with greater force as compared with elsewhere. "Little Trout Rod" in his letter to the *Civil and Military Gazette*, of March 8th last, and who is an ardent advocate of the "flying mount" for

all spoons, himself allows that at Tangrot for large spoons, the old method of mounting is the best; and there may also be other places similar to Tangrot where the case would be the same! As to split-rings for large spoons, or where heavy fish are expected, I am generally opposed to their use. The Tangrot "Anglers' Book" shows a lamentable record of fish lost by split-rings breaking. All these matters are, however, according to the opinion of the angler; and, as a rule, each uses whatever kind of mount he may have proved successful with.

I here give that part of "Little Trout Rod's" letter referred to above for the benefit of my readers regarding split-rings and the mounting of spoons, and will refrain from further comment.

"But to resume: what I have been coming to all this time is the use of split-rings and flying mounts. I agree with what you say in both respects, and as I fancy few have had more experience than I have had, my opinions may not be considered worthless. I think when he refers to heavy fishing, and to spoon of $3\frac{1}{2}$ and 4 inch, Mr. Lacy has in his eye the famous "Chuckur" at Tangrot, and he writes accordingly. I may be wrong, and, if so, I hope he will forgive me. Now, I have fished that same "Chuckur" till I was quite sick of it and would never go to Tangrot again, and for years I have not. If, then, Mr. Lacy objects to split-rings *at that particular spot*, and also thinks that head and tail trebles are simply a necessity, why, I perfectly agree with him, and so will all who have fished there, and I will explain why I make an exception to my ideas regarding split-rings and head and tail hooks when used at Tangrot, or elsewhere under exactly similar circumstances. The fish have a knack there of taking the spoon with great force. You can often feel the blow holding the rod 30 or 40 feet off. I have seldom noticed this elsewhere. I have known Farlow's best split-rings (new ones) broken, several times, the instant the fish took the spoon. So well was this known at Tangrot by old hands, that no one who had been there before ever thought of using split-rings either to fasten on his spoon or the hooks, both

being fastened by thick copper or brass wire. Again, as regards head and tail hooks. At Tangrot you can't help yourself; use them you must. I should like to see anyone try and troll up that beastly old "Chuckur" with a $3\frac{1}{2}$ or 4-inch spoon with a flying mount. The tangle his line would be in would be a caution. This of course owing to the velocity with which his spoon so mounted would spin.

I have, I fancy, about the largest collection of fishing tackle in India; and though I do keep my old Tangrot spoons, with their head and tail hooks, in an old box as mementoes (rusty and dirty they are by the same token), among all my tackle I have not a single spoon that is not mounted "flying." I never use any other, never mind what the water may be, or what size the fish; and here I may add, for the information of anglers generally, that I never put on a spoon over $2\frac{1}{2}$ inch. I find that big enough for fish up to 40 and 50 lbs., and beyond that I don't go. If I find they won't take a spoon of that size, I put on a Phantom, or if I can get it, a natural bait which I am convinced is *the* thing at junctions, where best fish are nearly always taken. I don't mean that I do not use natural bait except where one river falls into another. I often use it, but it takes better there than elsewhere. And lastly, as I never go to Tangrot, I always use split-rings, taking care they are the best procurable. I use rings of half the size generally used, and always "nickelplated" ones. I get very good ones, as also hooks, from Mr. Luscombe at Allahabad, who keeps nothing but the best tackle, only you must know what to write for."

(Sd.) LITTLE TROUT ROD."

I have, however, digressed considerably from the subject in view, *viz.*, the mounting of small spoons, so I will now resume the original thread of my discourse.

For small spoons, I think that there is no better way of fastening them to the trace, *i.e.*, to the end swivel of the trace, than by a small split-ring, although the use of a split-ring for larger spoons, and when fish over 20 or 25 lbs. are expected, I

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am somewhat opposed to, for reasons which will be explained and pointed out hereafter.

Now, with reference to the mount for a small spoon, there are many in favor of single hooks being used, and many in favour of triangles, which latter are, I fancy, in the majority. Perhaps a spoon spins better with a mount composed of single hooks, but there is not the same chance of the fish hooking himself on a single hook as there is on a treble hook, particularly when it is remembered that in many cases a fish is hooked more or less foul, outside the mouth, on top of the head, etc., and that this is often caused by a fish rushing at the spoon, and, perhaps, misses it, or overshoots it, and on turning round, doubtless having found out or seen that it is not a fish, gets hooked in one of the above-mentioned places.

However, whether the mount is composed of single or treble hooks, there are two principles which, in order to avoid breakage and loss of fish, must always be attended to:—

(1.) That when the mount is composed of two or more hooks, either single or treble, the upper one should be a “ringed” hook, either a ringed Limerick hook or a ringed triangle, as if attached to the spilt-ring by a gut loop, this is first quickly frayed by changing the spoon, etc., and secondly, by this fraying is likely to break at a critical moment; and, moreover, the fraying of the gut is much increased after two or three fish have been caught, particularly if any have been played for any length of time.

(2.) The second principle is, that the two hooks composing the mount should be whipped on the gut, so as to preserve a space of at least $\frac{1}{4}$ or $\frac{1}{2}$ an inch or more, according to the size of the spoon, between the two hooks, which precaution if neglected, and the hooks are whipped on too close to each other, makes the mount too rigid, which often causes a fish to get unhooked, and somewhat in fact, has a similar action to that of playing a fish with a very stiff rod!

Having observed the above principles in making up a mount, there are certain other details to be attended to, which,

although, perhaps, not so important as the above-named principles, at the same time should be generally observed :—

(1.) The two hooks (if single are used) composing the mount, should be graduated in size, the biggest being the bottom hook. This is, however, a matter of no great importance.

(2.) That the bottom hook (whether single or treble) should be so adjusted on the mount, with reference to the size of the spoon, that the bend of hook is clear below the bottom of the spoon when suspended vertically.

(3.) That the mount should hang on the “ belly ” side of the spoon and not the “ back.”

All these mounts for small spoons should be on gut, whether double or treble, is a matter of taste. For my part I generally use treble (but not twisted), as it makes the mount stiffer when the gut has been saturated, and also it is, of course, stronger. I have seen some mounted on wire, but these are usually too clumsy and rigid. Whether the bottom hook of the mount is ringed or not, is a matter of option, but of course an unringed hook is much neater in appearance and less clumsy.

For the upper hook in single mounts, as I have before stated, a ringed hook is recommended. The rings of the ordinary ringed Limericks are, as a rule, just about the right size. There are several kinds of ringed hooks sold by various tackle-makers, and the angler should have no difficulty in suiting himself. A “ Rhoe Carp ” hook, as manufactured by Messrs. Alcock & Co., of Redditch, is suitable for the upper hook of a small mount; for the bottom hook an ordinary unringed Limerick, or whatever pattern may be preferred. Which are the best shaped hooks, Limerick, Sneckbend, Sprout, or any of the other kinds, is a matter of opinion, but personally I consider for all Indian fishing, that the Limerick is the best. While on this subject of hooks, I would point out how often a hook, whether single or treble, breaks just under the barb, by coming in contact with some bony portion of the fish's mouth. If the barb could only be made in an additional

piece brazed on, what an advantage it would be, instead of being cut out of the piece of steel wire used in forming the hook? I have never heard of, or seen hooks made in this way, but they would be well worth a trial. Treble mounts for small spoons are usually made up with triangles made of too thin steel, and breakage is the continual result of using such fine hooks.

Triangles of solid and powerful description should be used, and although they may appear clumsy, make up for this by fewer fish being lost. On Plate II, at the end of the book, are given diagrams of the various kinds of mounts for small spoons, and from which it is hoped that the foregoing explanations and descriptions may be made clearer. If the upper hook of the mount is not ringed, or ring is too small, a small piece of brass wire can easily be made into the shape of a small ring and whipped on to the shank of the hook when being mounted, and which, although, perhaps, a little clumsy, is better than trusting to a gut loop.

It may be here mentioned that the above are what are required, and are necessary for any one commencing fishing in India, and I will give the same in a tabulated form below, with the least number of each article that would be required at first, and the average price of each article :—

(1.)	A 12 or 14 feet rod as before described	...	Rs. 20
(2.)	A reel ditto ditto	„ 12
(3.)	A line ditto ditto	„ 9
(4.)	Six single gut traces, complete with swivels, &c., from 2 to 3 yards as preferred,	Rs. 9 to	„ 12
	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">{</div> <div> or if made up by oneself, about 12 annas to 1 rupee each according to quality of the gut </div> </div>		
(5.)	Six small spoons mounted	... Rs. 6 to	„ 9
	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">{</div> <div> or if made up by oneself, about 6 to 8 annas each or less. </div> </div>		
(6.)	Spare triangles, hooks, split-rings, and other sundries	„ 10

(7.) Landing net, not absolutely necessary, Rs. 2 to	„	5
TOTAL HIGHEST ESTIMATE	...	„ 77
TOTAL LOWEST ESTIMATE	...	„ 60
APPROXIMATELY	...	„ 70

The above estimate is about the least that one would require to commence with. As will be seen, a good lot can be saved by making up things oneself, and as the angler is often cut off from shops, &c., it will be found of the very greatest use to be able to do so.

With reference to other baits for small Mahseer, in addition to that universally used, *i.e.*, the spoon, they are as under, and I will now proceed to treat of each under its separate heading:—

1.—Fishing with natural bait, *i.e.*, the “Chilwa” or other small fish.

There are several methods of fishing with “Chilwa:”—

- (1.) Spinning the “Chilwa.”
- (2.) Using it as a “dead bait.”
- (3.) Using it as a “live bait.”

(1.) *Spinning the “Chilwa,” or other small fish.*—A “Chilwa” is the best, if it can be procured, which it usually can be, and this method of fishing requires even more skill than fishing with a spoon. Fish of large size up to 30 lbs., or more, may be caught when spinning the “Chilwa.” The rod, line, and trace are the same as previously described, but the mount for the “Chilwa” is as follows:—

Take a large size single hook, ready mounted on gut, and at a suitable length above the end of the shank of the hook whip a small triangle which is used as a “lip” hook. It is advisable to have several of these mounts ready, so as to suit “Chilwas” or other small fish of different sizes. To bait the same, the large or “tail” hook is thrust in through the membrane of the tail, and which should be tied round with a piece of white thread; the treble hook is hooked into the mouth of the “Chilwa” and it will be found by adjusting the size of the mounts to the several sizes of fish used, that the body of the fish

should remain slightly bent or curved, which gives the "Chilwa" a spinning motion when drawn through the water. For this purpose, the distance between the bend of the "tail" hook and the treble hook inserted in the lip should be a little less than the length of the fish used, measuring from his nose to the fork of his tail. It will be found that with this mount the "Chilwa" will spin fairly well, particularly in a run or swift water. I forgot to state that the "tail" hook should be passed in through the mouth and out of the gills, before it is hooked into the tail of the bait, and if a few turns of white thread are given under the gills, and taking in the gut of the mount, the same will be made much more secure and stronger. Diagrams of the mount by itself and of the mount baited are given on Plate II at the end of this book.

The Chapman Spinner.—Another way of mounting a "Chilwa" for spinning, and it is a very good way, is as follows:—A body of lead is prepared, having a needle running throughout its length, the length of the needle being about the same as the bait to be used; the length of the lead should be about half the length of the fish used, and should, in its centre, be a little thinner than a pencil; in fact, a very good one can be made out of a cylindrical lead, the same as used on traces for sinking the spoon, etc. To the head of this needle is a ring, soldered on. The lead is moulded on to the needle, which forms its centre, so to speak; at the end of the lead is a small hook, with its point upwards, *i. e.*, if the needle is held with its point vertically downwards. To bait with this is as follows:—The point of the needle is entered in the fish's mouth and pushed on until its point reaches the tail and all the lead is taken into the belly of the fish, the ring at the top of the needle alone remaining outside the mouth. By a sharp snick or jerk, the hook at the end of the lead can be fixed inside the fish, so that the needle and lead cannot be pulled out of the fish without tearing the inside up. Just between the ring and the commencement, or top of the lead are fixed two small fins, made of brass or other metal, of the same fashion as "Phantom" and other baits are provided with. These, of

course, remain outside the mouth and cause the fish to spin with great rapidity. The ring can be attached to the trace with ease, and a "flying mount" of two or more triangles, or single hooks, as preferred, can be attached to this ring, and which is a very great advantage. The advantages of this over the previous method, are that the bait is not so liable to be torn when casting, and that it spins truer and with more rapidity, and by using a "flying mount" fish are more liable to be firmly and quickly hooked. If preferred, the hooks of the "flying mount" can be inserted into the fish, so as to keep them close to the body.

Diagrams of this kind of spinner, both by itself and when baited, are given on Plate III at the end of the book, and from which it is hoped that the above explanation will be made clear.

Care should be taken that the little hook let into the lead to fix into the belly of the bait is sufficiently strong and powerful. Often in this kind of spinner, when bought, this hook is made of soft wire, and is quite useless, and does not sufficiently secure the bait. This tackle is called the "Chapman Spinner."

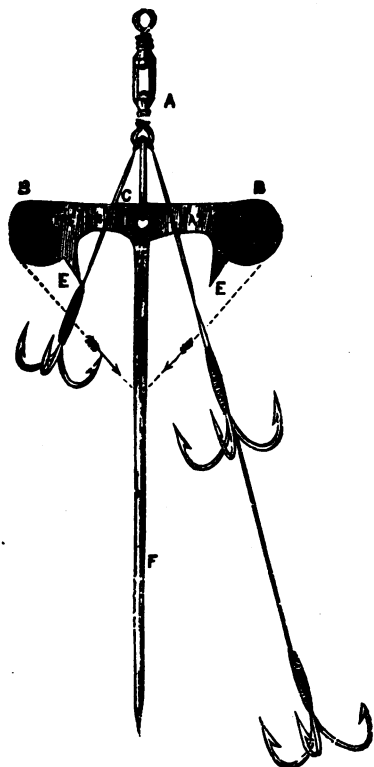
The Archer Spinner.—There is another kind of spinner called the "Archer Spinner," which is somewhat on the same principle as the above, the difference being that there is no lead moulded on to the needle, and there is no small hook to fix inside the belly of the bait. The two fins at the head of the needle are on hinges, so that they can be compressed downwards and inwards. Each fin is armed with a small spike, which on being pressed penetrates the gills, one on each side. This spinner is manufactured by Messrs. William Haynes & Co., of 63, Patrick Street, Cork, and to make the above description more explicit, I will quote his directions for use issued with each "spinner" sold.

The "Patent Spinner" can be used with almost every kind of bait, whether artificial or natural, but is especially adapted to the latter, such as stone loach (killough), minnow, gudgeon, par, prawn, etc. All the different kinds of baits can be put on the

one spinner, and changed from one to the other without a moment's loss of time, or any injury to the baits, which can be put on or taken off a dozen times if necessary.

For Sea Fishing, the spinner is invaluable. The natural sprat, sand eel, etc., can be put on it most perfectly and securely in an instant; also the India-rubber eels, so much used for pollock, bass, etc., can be put up, any size or colour, and changed from one to the other without the least trouble or loss of time.

To bait the Patent Spinner, open out the fins, which act on a joint, to a right angle with the needle, then pass the needle through the bait, and gently close back the fins until the sharp points at either side penetrate the gills. Nothing more is required."



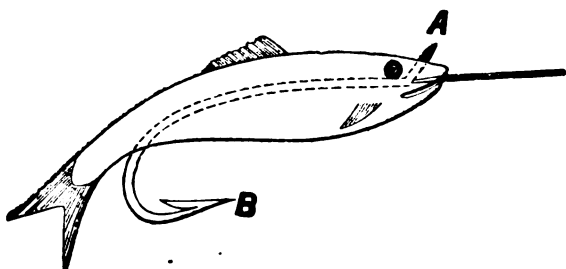
In the diagram here given B B are the fins, C the point where both fins are rivetted on to F the needle; E E are the two spikes to secure the bait by compression. I have given this spinner a thorough trial, and can fully recommend it. It is selling by thousands at home, and spoken of most highly by all the leading anglers. In time it will, I fancy, entirely supersede the Chapman Spinner. If necessary lead could easily be moulded on to the needle.

It is sold in India by Messrs. Scott & Co., of Rawalpindi and Murree, and doubtless by other tackle firms as well.

Luscombe's "Chilwa" Tackle.—

Another way of spinning the "Chilwa" is as follows:—The tackle in question is made and sold by Mr. T. P. Luscombe, of Allahabad, and a diagram of

the same showing the "Chilwa" baited, is herewith given. The dotted lines show the position of the shank of the hook inside the body.



The chief feature of the tackle is that the end of the shank (A) of the hook is turned up and can be fixed in the bones of the head of the bait, which prevents the same from doubling up, and secures it very firmly. I cannot do better than quote Mr. T. P. Luscombe's directions for using it. "To bait the hook, take a 'Chilwa' of the required size, between the thumb and second finger of the left hand sideways; insert the point of the hook B into the mouth and pass downwards, humouring and bending the 'Chilwa' till the point B can be got out about the anus or as far down as necessary to give the required bend, necessary to give a slow or rapid spin as may be required. Catch hold of the point B, and draw the body of the hook into the fish, till the projecting end of the shank of the hook A can be pushed back into the bones of the head of the fish as per sketch above. The bait will now spin or run as required, but it will last longer if the mouth be sewn up. These hooks can also be made with lead on the body of the hook so as to sink the bait."

The above tackle I have tried myself, and consider it very simple. There is a difficulty at first in getting the "Chilwa" to spin sufficiently fast, that is to have sufficient bend in the body, but this difficulty is soon overcome with a little practice. It is also very good for a picketed or a stationary dead-bait, and the fish on seizing the same is almost certain to be hooked at once.

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Another method of baiting the "Chilwa" for spinning is as follows:—The tackle required is an ordinary treble hook on a length of gut or whatever may be used. A baiting needle is requisite. Insert this point foremost at the *anus* and bring it out at the mouth. Before pulling it through, it is necessary to hook the loop of the gut on to the eye of the baiting needle; pull the baiting needle out at the mouth, drawing the gut after it till the hook comes home to the *anus*. When the hook is home to the vent, embed one of the three hooks of the triangle firmly in the bait. The other two hooks of the triangle will, therefore, be lying close against the fish, and in this position are scarcely perceptible. If you use a sinker—which if you do, should be a barrel-shaped lead with a small ring at one end—pass the baiting needle through this ring and run the sinker down the line, and push it end foremost down the fish's throat, so that it is entirely concealed within the mouth of the bait. Having done this, sew up the mouth of the bait. The bait will bend quite sufficient to impart a rotatory motion by working down on to the hook. A sliding lip hook could be used, but it would be necessary to slide it down the snood after the bait was adjusted, and the baiting needle removed. This would necessitate the loop of the snood or length of gut on which the triangle is whipped being passed through the rings of the sliding lip-hook. If used, the lip-hook should be hooked through both lips from below, but in this tackle I consider a lip-hook to be of very little advantage. There are several kinds of flights in use for pike and trout fishing at home, all of which are first rate, and the angler can pick and choose between them, if he does not care to try any of the methods above mentioned.

(1) *The Francis Flight*.—A diagram of this is given on Plate IV, from which it will be clear how the bait is put on and adjusted.

(2) *The Pennell Flight*.—This also is much used for spinning for pike in England, and a diagram of this is given on Plate V.

(3) *The Thames Trout Spinning Flight*.—This consists of a lip-hook and four triangles. The triangles are hooked into the side

of the fish, and a twist is given to the body of the bait, the tail being hooked up to one side.

The best bait for spinning is a large sized "Chilwa," as the body is very thin, and this little fish is generally easily procurable anywhere. If, however, it is not to be procured, any small fish can be used as a substitute, either Mahseer or "Rohu." Before concluding the subject of spinning the "Chilwa" or other small fish or Mahseer, I cannot refrain from quoting old Izaak Walton's method of spinning the minnow for trout or pike, which he describes as follows:—

"And then you are to know that your minnow must be put on your hook, that it must turn round when it is drawn against the stream; and, that it may turn nimbly, you must put it on a big-sized hook as I shall now direct you, which is thus: put your hook in at the mouth, and out at the gill; then, having drawn your hook two or three inches beyond and through his gill, put it again into his mouth, and the point and beard out at the tail: and then tie the hook and his tail about very neatly with a white thread, which will make it the apter to turn quick in the water; that done, pull back that part of your line which was slack when you did put your hook into the minnow the second time. I say pull that part of your line back, so that it shall fasten the head so that the body of the minnow shall be almost straight on your hook; this done, try how it will turn by drawing it across the water, or against the stream; and if it do not turn nimbly, then turn the tail a little to the right or left hand, and try again till it turn quick, for, if not, you are in danger to *catch nothing*; for know, that it is impossible that it should turn *too quick*." This was Walton's method two centuries and a half ago, and a good one too!

(2) *Using the "Chilwa" as a "dead bait."*—This method, and it is very deadly in the hot weather months in many streams in the Punjab, and particularly so in the Sohan, Leh, and Korung—is very simple. No trace with swivels is required, only a gut bottom, say, three yards in length, and a large sized single hook, which is passed in through the mouth and out of the gill and

hooked into the tail. The fish should be bound about behind the gill with white thread as described for spinning.

The hook baited like this may be cast into a rapid, and allowed to take its chance, or it may be used with or without a float in pools or still water. The great secret of success in this kind of fishing is to fish very deep with the bait close to the bottom. I have made very good bags of small Mahseer fishing in this method; the fish are not very particular as to the freshness of the bait, and I have seen them take a "Chilwa" so dry, and which had, I think, been in a man's pocket all night, that it almost broke to pieces in baiting it.

It is astonishing sometimes how very small Mahseer will take this bait, and I have caught one or two only a little longer than the bait itself, certainly not double its length.

(3) *Fishing with "Chilwa" or other small fish as a "live bait."*—This is seldom practised, and no advantage is gained by so doing, as the Mahseer will take a dead bait just as well as a live one. However, if fancied, the "Chilwa" or other fish can be hooked lightly through the nose or back fin, and used in the same way as fishing with live-bait for pike as practised in England.

II. *Fishing with Frog.*—In the 1st edition of the Handbook, this description of fishing was included in Chapter II, which relates to the tackle required, and the method of fishing for heavy Mahseer, as I had no experience of fishing with this bait until after the manuscript of Chapter I had gone to press, and as it is more suitable to light fishing, I now include it in this Chapter. On the other hand enormous fish are to be caught on frog, which is, I believe, the common bait for large Mahseer near Sopor on the Jhelum and in Kashmir. Fishing with frog is extremely killing on the River Muhl, in fact for this river a frog seems to be the bait of all others, and the fish take it at times in preference to a spoon or any other bait. The river which flows through rocky gorges and valleys does not appear to contain any "Chilwa" at all, at least as far as I can ascertain, or at all events very few, and I likewise noticed very

few small fish of other descriptions. There are, however, along its banks, narrow strips of ground, flooded and cultivated with rice. These rice beds swarm with frogs, and, on a flood coming down, many are doubtless washed down stream into the main river. It is extraordinary how each river has its favorite bait. For instance, in the Nerbudda, the fish will look at nothing but parched gram or rice, owing to the numerous "ghats" and temples along the banks from which the Hindus feed the fish with it, and throw great quantities in. In the Chiblat, melon seed seems to be a favorite bait, there being a lot of melon beds along the banks from which the stuff must get washed or thrown in. In the Sohan, "Chilwas" abound, and this is a good bait for this river. In the Leh, there are numerous "panchakkies" from which "atta" gets washed in. The fish collect near these, and they will take "atta," although perhaps not in preference to other baits, but more readily than they do in most other streams; and in the Mahl, the river under reference, they take a frog greedily, because it abounds along the banks. Many may ask what kind of tackle should be used with frog? Doubtless nearly everyone will have different opinions on the subject, but after trying one or two different dodges, I concluded that the following tackle was the best:—

Take a medium sized Salmon hook, on single or treble gut as preferred, whip on a small lip-hook above it, say $\frac{1}{2}$ to $\frac{3}{4}$ of an inch facing the reverse way—and from this point attach two single hooks on lengths of gut about an inch long, to hang one on each side of the frog's body. Bait as follows:—Pass the big hook in at the mouth and out at the vent; pass the lip-hook through both lips; the two flying hooks should hang, one on each side of the body. Then take a piece of khaki thread and bind the frog about with it just under the arm-pits taking in the two flying hooks, or leaving them loose as preferred. These two flying hooks may, if preferred, be hooked in through the membrane of the frog's forefeet. An additional flying hook is a great advantage, and takes many fish that would otherwise "come short." This flying hook, if used, should also be passed in at the mouth and

out at the vent so as to render it less conspicuous. The diagram of this tackle at the end of the book shows it with the extra flying hook, but this can be used or not, as preferred.

It is quite immaterial the frog being dead, in fact it is best to kill it by a knock on the head before baiting. The method of working it is to cast it in at the head of a rapid and let it run down, and if not taken at once keep on letting it out, and then slowly winding it up again.

Sometimes the frog turns over on its back, which should not be. A grain of No. 1 split shot attached to the thread under the chest by which the frog is tied will keep him upright and in a proper position. It is an advantage if the extra flying hook is passed through the membrane of the frog's hind feet. A diagram of the above description of mount is given on Plate VII. at the end of the book. Perhaps for picketing the frog, or using it as a stationary bait for large Mahseer, as is done in the Jhelum in Kashmir, the above tackle would be too complicated. A large single hook or triangle with a small one whipped on for a lip hook would, perhaps, be all that is required.

If a live frog is fancied, a large single hook run through the skin of the back is all that is requisite, with perhaps, a loose triangle, or better still two triangles, like the "Saddle-Snap" tackle used at home for pike. The previous method, I can assure my readers, is, however, far more killing, and the Mahseer do not seem to care the least whether the frog is dead or alive. I may here mention that up to the present I have heard of no other rivers except the Mahl, the Jhelum, in Kashmir, and parts of the Sirun river, where fishing with frog is effective for Mahseer.

Another good way of mounting a frog is to use simply one triangle on a snood of gut. Take a baiting needle and enter at the *anus* and bring out at the mouth and pull the triangle close up between the hind-legs.

The frog will "sit down," so to speak, on the triangle, which is almost invisible. This is a good way for a stationary or picketed bait, but the frog should be a small one. Another way is to have a flight of three triangles. One triangle hook through

the lips, the other, or centre one, into the belly, and the end triangle will come between the frog's hind feet, which should be tied to this triangle. This prevents fish seizing the frog only by the hind-legs and running off with it and dropping it ; but this description of tackle perhaps shows too much in clear water, at all events small triangles should be used. The upper, or "lip" triangle should be as small as possible. Since writing the above, I have returned from a trip to the Mahl river. Further experience has convinced me that frog is *the bait* for this river, particularly in the last ten miles of its course, and if the water is slightly colored from rain. Just after rain, and when the water is clearing, I found to be *the time*. The fish then take it ravenously. I see by my diary that in nine days' fishing I got 143 lbs. of fish on this bait, besides others taken on spoon and Indian corn or *machai*. I was much annoyed by fish "taking short," and to obviate this, used an additional long flying hook, which I hooked into the frog's hind feet. This I found a great advantage, and after I adopted this lost much fewer fish ! They take the frog by the hind feet and run off with it, dropping it when they see what it is, but this additional "flying hook" to a great extent prevents them doing so. I tried using a frog as is done at home for pike, *viz.*, with its head reversed, so as to let it run down stream head first. Not a fish would look at it this way ! If they would it would be a great advantage, as all that would be required would be a single triangle on a snood, passed with a baiting needle in at the mouth and out of the *anus*, and the frog's hind feet tied together on to the trace. However, as I before stated, the fish would not look at it this way. I wish some one else would try this method and report his experiences ! Another hint : on the Mahl there are two kinds of frogs, *viz.*, a green white-bellied and very active one, and another, a kind of toad I think, speckled and foul smelling. Never use the latter, only the *white-bellied* ones ! Your coolies or shikari will bring you the other kind as they are much easier to catch, and are found in every rice pool. The white-bellied ones are hard to catch, and also there are not so many of them, but use none but these, and

insist on your shikari or coolie bringing these only. Also, if there are two or three good pools near your camp, ground-bait them with five or six *dead* frogs overnight, and also throw in one or two before commencing fishing. This has a great effect !

As I previously stated it is hard to decide, without much experience, what is the best tackle for frog fishing, and many anglers will have their ideas on the subject ; but it is, however, hoped that the above notes and suggestions will prove useful. Frog tackle on my pattern can be made up by Mr. T. P. Luscombe, of Allahabad.

III. *Fishing with "atta" or paste-baiting.*—This is as a rule rather slow work, but at certain times when the rivers are in flood, it is about the only thing one can do, particularly if natural bait is not procurable.

The chief difficulty many find in this kind of fishing is to get the *atta* to stick on the hook, and many mix wool, etc., with the *atta* in order to make it more tenacious and to stick on the hook. This is, however, quite unnecessary, as if the *atta* is cooked before use, or even if an ordinary *chupathee* is kneaded up, it will be found to be tenacious enough for any purpose, and, in fact, is too much so, as on a fish taking the bait it will sometimes be found that the hook will not cut its way out of the bait.

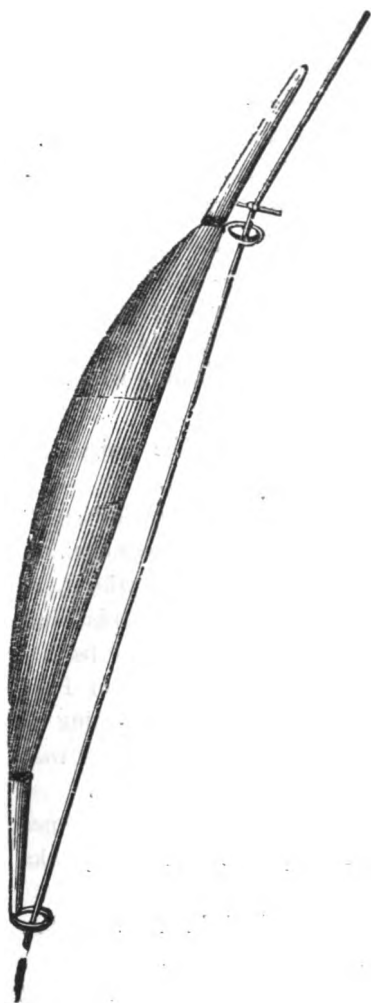
An ordinary large sized single hook is required, and no lead or float is necessary, and the bait should be cast out into the deepest part of the pool. This method I find to be best myself although some prefer using a float with line shotted. A shelving sandy bottom should be chosen as the fish are more likely to see the bait on this, than if it is lying among stones. It is a good thing to pull the bait in every ten minutes or so. It may have been nibbled away at by small fish, or have fallen between a cleft of rock or in such a situation that the fish cannot well see it. The very early morning is perhaps the best time for this kind of fishing. Allow the fish to run off with the bait two or three yards before striking, and do so by a sharp jerk sideways, not upwards. Very often all kinds of things are mixed up with the

atta, which is, I think, unnecessary. If any thing is used, a little turmeric or *huldee* is recommended.

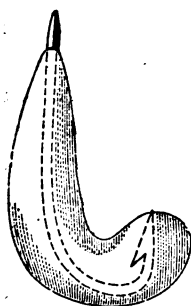
If however a float is used while fishing with *atta*, or, indeed, in any kind of bottom fishing for Mahseer, the "Nottingham style" of fishing is recommended. Doubtless few fishermen

in India know exactly what this means. I will endeavour to describe it. The peculiarities of the float used in this style of fishing are as follows:—It is curved, or bow-shaped, instead of being straight. The bottom ring is at right angles with, instead of being in the same line with the wooden shaft. A quill cap is not used but a ring is fastened just at the shoulder of the cork body of the float, projecting from it through which the line can pass freely. The float can therefore travel up and down the line, and is not fixed at any particular spot. A diagram of this float is given marginally, which will make the above clear. On your gut cast at the "depth" you wish to fish, a small piece of gut or fine wire about a quarter of an inch long is knotted cross-ways, and *above* the float. The result is that the line can run down through the float to this point, the float remaining stationary. The great advantage of this is that on the line being

withdrawn from the water, the float falls, or slides down on to the



shot (which should be bigger than the bottom ring of the float), and at this point forms an additional weight near the bait, by means of which very long casts can be made. When, after making your casts, the bait and float reach the water, give out your line freely; the weight of the shot and bait, with a little assistance from the rod, will pull the gut through the loops or rings on the float until it is checked by the small cross piece of gut or wire at the required depth. You can by this means fish very deep, say ten feet or more, more easily than by the ordinary way, and you can cast further, both of which are special advantages in Indian waters, whether tanks or rivers! Another advantage is that you strike the fish direct, and have not got to half-pull the float out of the water, thus causing a disturbance, as is done in the ordinary way. The above style of float fishing is recommended for every kind of Indian bottom fishing except for Labeos, and if any one cares to try it he will find it a great advantage, that is, if he cares to use a float while fishing with *atta*, worm, etc., as a bait.



The hook for *atta* should be baited as shown in diagram herewith given.

IV.—Another way of fishing for small Mahseer is with parched gram or *chunna*, which in places where the fish will readily take it, is very killing. A full description of this kind of fishing is given under the head of fishing at Jubbulpur, in the Nerbudda River, in Part II of this book, where this kind of fishing is practised to perfection. In the Mahl I have lately found that the fish take *Machai* or Indian corn much in the same way.

V.—Fishing with pieces of fig, melon, worm, &c., is sometimes practiced, and the Mahseer in certain places will readily take these baits.

Fishing with melon is a very killing method in the Chiblat. An unripe melon is necessary, and the seed with the pith inside is used. It is difficult stuff to keep on the hook, and must be tied on with thread. Two single hooks are, I think, best, one hook

being mounted above the other. The bottom hook may be slightly larger with advantage. The two hooks are hooked into the pith of the melon, which is tied on them with thread; a piece of the melon, an inch or an inch and a half long, and as thick as one's finger, should be used. An ordinary single triangle is, however, very good for melon fishing, or a double hook, as sometimes used for flies, would do excellently. It is also very killing in the Sohan, Leh, and Korung.

Fishing with fig, mulberry, &c.—Fishing with fig is practised successfully in Central India, and with mulberry in Kashmir. No special tackle or knowledge is requisite for these methods.

VI.—*Worm fishing.*—Sometimes practised in the rains and in dirty water, and sometimes with success, but is slow work. A single hook is all that is required. A float may be used or not, as preferred. If used, the "Nottingham style" of fishing, as described in this Chapter, is recommended.

Phantoms and artificial baits.—With reference to artificial baits, such as phantoms, Archimedean baits, etc., they are sometimes used with effect, but I do not think, on the whole, that they are anything like so good as a small spoon, although in certain rivers the fish will take a small phantom greedily. In certain parts of the Poonch River, I have found this to be the case when I could not get a fish to look at a spoon. For choice, a phantom is recommended in preference to any other kind of artificial bait, it being, I think, more natural, less liable to damage, and less costly. A "Devon Minnow" is also an excellent bait.

Fly fishing.—With reference to fly fishing for Mahseer, which is, of course, the cream of any other kind of fishing, I am unable to speak much from personal experience, as I have never been able to find a place where the fish would take a fly very readily, or where any good resulted from using one, although I believe that in the rivers in the Dun and North West they will take a fly as readily as any other kind of bait; but in the rivers of the Punjab I have never been able to do any real good with a fly, although one does occasionally take a few fish, generally quite late in the evening, just as it is getting dark. A small dark

coloured fly appears to be very good, and I prefer myself a black fly with a little yellow or white in the wings. I believe the flies ordinarily used for Mahseer are too large, and the fish seem to rise at a small fly more readily. The fish in the Korung River at times take a fly very well.

Referring again to fishing with the "Chilwa" or other natural bait, I have noticed that this is taken much more freely in the early months of the hot weather (end of March, April, and May) than at any other time of the year, and that in the autumn months it is of scarcely any use fishing with it; moreover, when the water is slightly colored—not too dirty—they take it more readily than in clear water. This applies only in a still greater measure to fishing with large baits for heavy Mahseer, which I have seen caught by this means in the most filthy water, and which will be described farther on.

The preceding remarks are intended to refer only to fishing for the smaller Mahseer 1 to 15 lbs., although many will apply to fishing for far heavier fish, and which will be noted and referred to in Chapter II regarding fishing for large Mahseer.

As a general rule, I think, it may be taken that for sport and recreation, the light fishing is the best, requiring greater skill and judgment to make a really good bag, and although it is very exciting work playing a 40 or 50 lb. Mahseer, this seldom occurs, and there are many men who are keen fishermen out here who have never taken anything over 8 or 10 lbs., and have been quite satisfied with the sport. The lighter the tackle and rod used, the better the sport, and to hook and land a 10 lb. fish on single gut is no mean sport; and, moreover, there is always the chance of getting into a larger fish, particularly when fishing with natural bait. I have seen a fish of 40 lbs. taken on single gut, and have heard of even larger. Of course, much depends on the play a fish gives, with reference to the kind of water he is hooked in. If a fish is hooked in very heavy water or a big rapid, his rushes will seem to be much more furious and determined than if hooked in dead water, where there is no impetus of the water to carry him forward or accelerate his

speed. In a big rapid the rush of the water will carry along even a dead fish, so as to make the angler think that his fish is still powerful, and doing its utmost to rush his line out. Very often fish are hooked in places where it is almost impossible to run them up on to a shelving bank. In such a case a fair-sized landing net is of great use, and by its means many fish are taken which would otherwise be lost. This is also the case when fishing from an anchored boat in deep water, as it is inconvenient, and moreover disturbs the fish to pull up the anchor, or stone, and get on shore. The handle of a landing net should be in two pieces, or if in one piece, it should be at least six feet in length. A very good landing net can be made up by a *mistri*, and which, for the rough work of this country, is superior to the patent folding nets; which often go wrong, and moreover are seldom made large enough for fish of 8 or 10 lbs.

Fishing for the smaller Mahseer with a spoon is generally carried on from the bank, or by wading and casting out towards the centre of the stream, or by letting the spoon run down and play in a rapid until it is taken by a fish. A few hints on this head may, perhaps, be of use. There is no doubt but that the longer the casts, and the further the spoon is allowed to run down the rapid, the more readily will fish take it, and the man who is able to cast a long line has a great advantage over one who cannot. Also many anglers fish only in the runs and rapids, and entirely neglect casting over the deep pools. It must be remembered that many fish, as the sun gets higher and consequently hotter, leave the shallow water in and about the rapids, and betake themselves to the deep still pools, which are often partly overshadowed by high rocks. It is in these pools that often good fish are taken, particularly when the sun is hot and the day advanced. Often by fishing in these pools a fish may be taken close to overhanging rocks, perhaps within a foot or two of the same, the rod having to be lowered almost perpendicularly to get the spoon into its proper position. Again, if there is an isolated, sunken rock in the centre of such a pool, it is almost certain to be a sure haven for fish, and casts should be made. all

round it ; the great secret in fishing in a pool of dead water is to let the spoon sink at least a yard under water, before drawing it up for commencing a fresh cast. At certain places, such as at Tangrot, a good deal of light fishing is done from boats. In fishing from a boat by which the spoon is trolled behind the boat, the secret of success is to let out as long a line as possible, according to the depth of the water, so long as the spoon does not foul in the bottom, and that there is sufficient line left on the reel in case of hooking a bigger fish than usual. In fishing like this after the spoon has been let out as far as deemed expedient, the line should be again wound up, and then let out afresh. In this method of fishing I have found the fish take the spoon while it is being run out more often than while it is being wound in. It is more advantageous to have the boat drawn up the pool for trolling by a rope, than to have it rowed up, as the splashing of the oars frightens the fish. Another successful way of fishing from a boat in a pool where the fish are shy is to have the boat sent up to the head of the pool overnight and then to fish down, letting the boat drop gently down the pool, anchoring it with a large stone at whatever places it is considered fit to make casts from. In this way the spoon reaches water which has not been passed over, or disturbed before by the boat. I have noticed that in some pools the fish do not seem to mind a boat coming *down* stream, but are much alarmed at a boat being dragged, or rowed *up* stream. This is only natural, the swell of the water is increased by a boat being pulled up stream, and moreover in many rivers, logs of wood, etc., are often floating down. Unless the fish is large, it is not necessary to land from one's boat to play and land it. With a landing net it can easily be taken in deep water, and pulling up perhaps a large stone as anchor, and punting the boat ashore disturbs the whole water round.

Playing a Mahseer.—As the principles in playing a Mahseer are much the same, whether the fish is large or small, I will here give an outline of the same. As my readers will doubtless be aware, the chief feature of the play of a Mahseer is the

tremendous rush he makes on first being hooked, and this is the same whether the fish be large or small, differing only in proportion according to its size. Another thing is that the first rush of the Mahseer is almost invariably made down stream! Many anglers say that the critical part of Mahseer fishing is getting over this *first rush*, and that when once it is over that the fish is theirs. In nine cases out of ten this is the case, whether it be the terrific rush of a fifty-pounder for a hundred yards or so, or whether it be the sharp little dash of a half-pounder on a light fly rod. After the first rush is over, the hook-hold is generally certain, for if the hold is insecure, either with the point of the hook on a bone, or only holding by a shred of skin, it generally gives way (*i.e.*, if it is going to do so) in the first rush. It is a generally understood thing that it is impossible to stop a Mahseer in his first rush. An attempt in ninety-nine cases out of a hundred would lead to breakage. Never attempt it! Let him go as hard as he likes for his first rush, at once lowering the the point of your rod in so doing. The jerk on the fish first taking the bait is generally sufficient to firmly hook it. Of course there are occasions when it is necessary to try and stop, or turn a fish, such as when he tries to leave his pool and rush down a rapid. This, however, happens very rarely! The Mahseer seldom does this; unlike the Salmon, which often rushes down through several pools while he is being played. Moreover, *if* a Mahseer does try to rush down a rapid in his first rush, he generally slackens off before he enters the broken water, and this is the time to try and stop him, if it is necessary to do so, either on account of all one's line being nearly run out, or from physical causes, such as high rocks, etc., which prevent one following the fish down into the next pool. Your reel should run easily, a stiff reel is fatal! One golden rule is, from first to last, *never give the Mahseer a slack line, not even for a single second*. This is the cause in most cases of the hookhold giving way if the fish is only slightly hooked. After the first rush is over, keep the line as taut as possible, and the point of your rod well up. This last should be specially attended to. The line should never be allowed to

"bag" or "belly," as if so, it is sure to get under a stone. Often the banks of Indian rivers are so rocky that one has to hand the rod to an attendant in passing from rock to rock, or getting farther down stream. The amount of risk consequent on this is, of course, dependent on the training of your attendant, and it is here, in critical moments, that the great advantage of having a "good man" with you comes in. I am an advocate of not putting *too excessive* a strain on to a fish while playing it. Keep the point of your rod up, and a steady even strain, increasing as the fish gives in. After the first rush a Mahseer seldom gives any more very long runs, generally, however, he gives a few vigorous dashes, but often bores down on the line, working his way both up and down the pool. Sometimes a large fish "sulks," and lies quite still. You can generally move him by throwing in stones, etc., or, if a boat is handy, moving down stream on him, and stirring him up with a pole. Some recommend a kind of paper or tin funnel to be let down the line on a fish, but this I have never tried and it seems dangerous, and would often catch in the top ring, and cause a foul. On the fish being exhausted, try and play him to a shelving bank free from stones, etc., where, if a small fish, it can be taken in the landing net, or, if a large one, seized by your attendant behind the gills and lifted out. In playing a fish, always keep yourself on the highest part of the bank, it does not matter if this is some yards from the water. In fact for big fish the farther the better! I have often played a big fish from a knoll or rock 35 yards from the water's edge. If the fish is large and you are fishing from a boat, it is generally best to land at once and play him from the shore. It is a great advantage for your rod to be as springy as possible. I have often found that on taking a fish from the landing net, that the hook has fallen out of its own accord, thus showing that it was only pressing against a bone, and not embedded in the fish. If the top joint had not been very springy, a fish hooked in such a manner would certainly have been lost. The above remarks apply to playing fish of all sizes, and as this subject is a general one, it is included in this Chapter.

Mahseer Fishing as influenced by atmospheric causes.—The weather in India influences the taking propensities of fish considerably, which vary a great deal according to localities. Generally speaking, Mahseer fishing is best when the weather is hot and dry. On many rivers the months of April and May are the best of all! Cold renders the Mahseer sluggish and ill-disposed to move. As a general rule, the clearer the water the better. After a flood or spate, when the water has cleared so as to be almost imperceptibly tinged, is the best of all. The angler's movements out here are much more affected by the weather than at home. How many of us know what it is to go a long distance, at much expense, and then on arrival at the fishing locality to find it all spoilt by "snow water" or that "rain in the hills." Generally, this comes down the day after you arrive at your destination! You have perchance ten days' leave—the water clears as a rule the day before you have to leave to go back to your Cantonment. There is nothing more uncertain than Indian fishing, and for this sole reason. How seldom a river is in good order for fishing. Taking this season at Rawulpindi, ever since March the weather has been unsettled. Continual dust-storms, rain and windy days. Wind is also detrimental to good fishing, and when the water is in ripples, as a rule, fishing is useless, and I give it up. Cloudy days are also bad for fishing, and the fish keep down at the bottom of the deep pools. Another thing—on some days the fish are rising by thousands, as far as one can ascertain at nothing, but apparently just for amusement, and in doing this I believe they are greatly influenced by the weather. I have found myself that the fish as a rule take worst during that period of the month when the moon is full or nearly so. I have found this to be the case on several occasions! Whether the morning or the evening is the best time for fishing is also often a matter of argument, and it is hard to say, but I think that, generally speaking, the morning is the best time for all Mahseer fishing, from 7 to 9 or 10 A.M., although in some rivers, and in certain seasons, the evening appears to be the best.

I am not an advocate of very early rising for fishing. The fish do not, as a rule, seem to come properly on the feed until the sun is well above the horizon, and the waters have been a bit warmed up. The question as to whether the evening or morning is the best time is, perhaps, very hard to decide, as at times they appear to be both equally good. Usually, however, for big fish, the morning is the best time, but in several rivers my experience has been that the smaller fish are more on the feed in the evening than the morning.

CHAPTER II.

“Notes on the tackle and outfit required for heavy Mahseer fishing where fish may be expected of a fairly large size.” By Capt. G. H. Lacy.

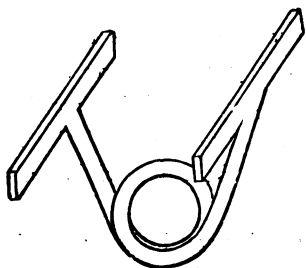
IN treating on the above, it will be generally found that the tackle required for this kind of fishing is much the same as that required for smaller fish, as described in Chapter I, except that the rods, line, etc., are of a heavier and more powerful description.

The Rod.—The rod should be from 16 to 18 feet in length, upright or standing rings are recommended. The end ring of the top joint should have a revolving wheel let into it, as this diminishes the friction on the line considerably, as by constantly revolving it continually presents a fresh surface for the line to rub or cut against, whereas a top ring made of wire alone is soon cut through and becomes useless, destroying the line at the same time, by being cut through, or deeply notched by continued friction caused by the winding in and running out of the line; or a “Bickerdyke” ring, as described in Chapter I, should be used.

Castle Connell rods are now much used in India, and are much superior to the ordinary ferruled rod. They are more powerful, play truer, and one can cast farther with them. Also they are not so heavy or cumbrous as the four-jointed rods generally in use; whatever the kind of rod used, it should not be too stiff, and many fish are lost by using a rod of excessive stiffness. The ordinary Salmon rod is all that is required for Mahseer. The so-called “Mahseer rod” which, however, one seldom sees now, is generally somewhat stiffer than a Pike rod, and is for all practical purposes useless. In former days, it was, I believe, imagined by English tackle-makers that the Mahseer was a fish something between a Pike and a Whale, and accordingly the most terrible looking rods were made for his capture. This theory has, I believe, to a great extent been exploded, owing, perhaps, to the great

increase of Mahseer fishermen in this country, and the greater facilities or transactions, by the parcel post and otherwise, between them and the tackle dealers at home. Care should be taken that a large rod is fitted with a good sized button at the end of the butt joint, which can be improved by being covered with leather. As to the length for a heavy rod, I think 18 feet should be the extreme length, and have always found that 16 feet is sufficient for all ordinary purposes. I believe the hexagonal cane rods are first-rate, but have not been able to make a trial of one yet myself, but their price is very great. Whether the glue with which the layers of cane are united would stand this country remains to be proved; but one thing is certain, they are beautifully light and, at the same time, extremely powerful rods.

For heavy rods, I would recommend the use of the "pronged" rod ring. The line is not so liable to catch in these, and



they allow the line to run easier than the old style. A diagram of the "pronged" rod ring is herewith given. Rings having a revolving metal core are very good for a large rod. The "Weeger" winch fitting, as described in Chapter I, is also advantageous. A diagram of

this is given on Plate VI at the end of the book.

The Reel.—This should be of sufficient capacity to hold 200 yards of heavy line, and should be either a 4½ or a 5 inch reel; a bronzed revolving plate check reel is recommended.

Above all things, it is economical in the first instance, for heavy fishing, to purchase the very best English reel. Reels made in this country by natives, although perhaps only a quarter the price of those of English manufacture, and which often look quite good enough, should never be used. At first they may do well enough, but at a critical moment the springs break, the plates become unsoldered from the spindle, or something happens by which a check is made and a good fish lost. A valuable reel

should always be kept in a leather case, made specially to fit it.

I have lately been giving the ebonite or vulcanite reels a trial. I found that at first although they do not crack as I was informed they would, yet they are much affected by heat and cold. In the early morning I have found my ebonite reel so stiff that it would scarcely revolve, whereas later on in the heat of the day it would run quite easily. This is a great drawback, and although I have only found this to happen occasionally, it is a nuisance. I was obliged to have the inside scraped out with a chisel or knife, and then the reel would run all right for a few days, but eventually the temperature affected it again. In the hot weather it was all right, but the cold, either by getting wet or otherwise, seemed to affect it, and to cause the ebonite either to shrink or swell, probably the latter. Otherwise the reel is perfect, being a quarter the weight of a metal reel. The above defect, however, lasted only for six months or so, and I now find that this never happens, and the reel is in every way a most perfect one. I would caution my readers against a new patent reel which has lately been brought out, and which by means of a screw can be made to run easy or stiff as required. It is sure to go wrong and to run stiff at the moment when this is not required! A friend of mine lately lost a good fish with one of these reels owing to this happening. Moreover, one does not require a reel to run stiff. It should be easy running at all times. The ordinary 5-inch reel is usually not made sufficiently broad between the plates to hold 200 yards of line. In ordering a reel the breadth between the plates should always be given, or a reel too narrow will, as a rule, be sent. Before using a reel a small hollow should be countersunk in the spindle or shank at one end of the hole bored through it, to receive the knot. This makes a great difference, and the line can be wound up evenly from commencement. The above improvement can be executed by any clever *mistri*.

The Line.—As regards the kind of line most suitable, there is often much argument. As to the quantity required, 200 yards

is necessary, or at the very least 150 yards, nothing less than this. In 1886 I was fishing with 210 yards, and this was all run out by a large fish, assisted by some rough water, and the trace (fortunately) smashed, being weaker than the line, or, perhaps, the whole line might have been lost. For my own part, I have usually found the Manchester Cotton Spinning Company's lines good enough for anything, and they are about half the price of the American plaited silk lines. I would, however, recommend that these lines be got direct out from home, as those purchased in this country are often rotten and nearly useless. The reason of this I cannot ascertain, except that, perhaps, the climate causes the lines to deteriorate if lying long out here; the cable-laid lines are as a rule better and stronger than the plaited ones. A line for heavy fishing is about the most expensive part of one's equipment. Even with care the best lines seldom last more than a couple of years, if used regularly; and 200 yards of good line is an expensive item. For this kind of fishing I have lately taken to using native-made lines, and have found them fairly reliable, and with proper swivels do not kink. The natives, and particularly the Jhelum boatmen, make them up from reels of cotton, laying so many strands together according to the thickness of line required, and then twisting them up together. White cotton is used, with two or three strands of black cotton, so as to give the line a checked appearance, and not to be too white. If a coating of waterproof be given to one of these lines, they will be greatly improved thereby. The plaited hemp lines sold by Manton and Co., Calcutta, are very good and very cheap.

With reference to the length of line given above as necessary, it has been remarked to me that this is excessive. Perhaps it is so, but with 40 or 50 yards out between your rod and the spoon, and fishing in heavy water, a large fish will take out the line at a wonderful rate, so it is as well to be prepared. As above quoted I have myself found 210 yards all too little, and in October, 1887, a member of the Club had his reel cleared of 260 yards of line by a big fish. On coming to the end, his trace, I think, broke! This gentleman was fishing with a 6-inch reel made

specially at the Roorkee workshops, and at the time he declared that he would in future use 300 yards of line, for which amount his reel was made. I may mention that when talking of this large amount of line, I am referring chiefly to fishing at Tangrôt where the fish run very furiously ; the water also being heavy. However, as I before said, I would recommend not less than 150 yards of line being used. It is a pity after, perhaps, travelling a long distance, and at much expense, and after having fished for days, to lose, perhaps, the biggest fish of the season just for the want of a few more yards of line. The angler will, probably, say " Oh ! it's not likely that I shall hook any big ones like that, so I'll risk it ! " Let him wait till he has hooked a monster fish, and lost it through insufficient line, he will *think of it afterwards* ! It is of no use then. Moreover, much harm to sport for the time being is done if a fish goes off with a trace, or, perhaps, twenty yards of line trailing from his mouth.

Traces.—The best kind of trace for heavy Mahseer fishing is a much vexed question, many successful fishermen advocating the use of wire traces, and many, perhaps, equally successful although, perhaps, now in a minority advocating gut traces.

Gimp is not often used in this country, although much so at home for pike traces. It is supposed to deteriorate by climate, but I have found a light gimp trace after lying by for six years sufficiently powerful for a 44 lb. fish, which gave right good play. With reference, however, to the question of Wire *versus* Gut, I am still undecided as to which is the best kind of trace.

For my own part I have been most unlucky when using wire traces, and have lost several splendid fish by them. As, however, I stated before, opinions on this matter differ greatly, as for instance, on referring to Mr. H. S. Dunsford's Diary of fishing near Dadupore and Tajuwala, in Part II of this book, it will be seen how unfortunate he was when using wire traces, and on referring to General Dandridge's account of fishing at Torbela, it will be seen that he used nothing but wire traces, and did not have a single breakage. On looking through the "Angler's Book " at Tangrôt, it will be noticed that the records of breakages, when

using gut or wire traces, as the case may be, is about equal, one angler having been unlucky enough to lose two very heavy fish in one afternoon on wire traces. Of course, this greatly depends on what kind of wire is used, how twisted, annealed or tempered. Wire traces are, doubtless, finer and less conspicuous than gut ones, and certainly far cheaper.

The great objection to wire traces is their liability to kink, by which, doubtless, most of the breakages recorded are caused.

They are almost useless for casting a spoon, as they then kink and become quite unfit for use, and often break in the act of casting. With wire traces the use of "Pennell" swivels described in Part I, Chapter I, will be found advantageous, and they greatly lessen the chances of kinking which so often happens. Very neat steel wire traces can be procured from most tackle makers, but copper or brass wire have, perhaps, been most generally used, but these are going out in favour of steel wire, which is now most generally used. My own experience regarding wire traces is that they depend a great deal on how they are annealed or tempered, but general opinion is now against annealing steel wire. The following recipes for annealing are given for different kinds of wire:—

Brass Wire.—Place the coil in a gentle heat, *i. e.*, between 10° and 100° Fahrenheit, and when red hot, in about three minutes' time, remove the coil and allow it to cool in a dry place, not exposed to the breeze, so as to allow it to cool gradually. *Copper Wire* may be annealed in the same manner, but it certainly seems, from the pliable nature of this kind of wire, that annealing is scarcely necessary. *Steel Wire* may be annealed by boiling in oil for twenty minutes and allowing the wire to remain in the oil until cooled down, when it should be taken out and rubbed with a flannel. Dr. Percy's book, "Metallurgy—Iron and Steel," gives many methods and ways of annealing.

The opinions as to annealing, however, differ greatly, and I would refer my readers to General Lane's very interesting Chapter on this subject,* and I am sure his system, when fully tried and proved, will be of great use to anglers. This

gentleman has devoted much time and attention to the matter, and, as will be seen in Chapter IV, he is an ardent advocate of wire traces, his great principle being that the wire should *not* be annealed.

I will give here some interesting notes on the subject by Mr. R. S. Bru  re, Punjab Police, a member of the Fishing Club.

Traces.—I have fished for over twenty years with nothing but wire traces—gut traces hold big fish I allow, but their great disadvantage is that they wear out so quickly, are seen by the fish easier than wire ones, and are more expensive. You have also to use more lead to sink them lower down. A wire trace lasts for ever; I have some made up ten years ago and they are as good as ever. You should use the best wire for the purpose; which is that sold for *sitars* (a native musical instrument); this is the best, and you cannot get better steel. Three strands are stronger than six strands of gut and show less than 3-ply gut; you can make your traces any length you like, and have them any thickness. DON'T ANNEAL THEM, and the wire should be PLAITED not twisted with a machine. They will not break when casting a spoon if oiled occasionally to prevent them rusting. They will last for years with ordinary care. You must, however, have a little box with pegs in it, and wind your trace round these, or keep each trace in a coil separately tied with two or three threads." The above notes are very interesting, and I hope to give the plaited wire traces an early trial. There is no doubt but that if a wire trace can be invented that will not break in casting, that gut will be almost superseded, at all events for heavy Mahseer fishing.

Swivels.—The same remarks given on this subject, regarding swivels required for light fishing, in Chapter I, hold good with reference to heavy fishing, and particularly so the instructions regarding the preparation of the swivels, by grinding it and oiling it before use. Very large swivels are not required even when the heaviest fish are expected, and very often one sees swivels unnecessarily large being used, particularly on traces made and sent out to India, specially for large Mahseer.

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The following notes on swivels, kindly furnished by Mr. T. P. Luscombe, of Allahabad, and member of the Club, may prove useful :—

“ I will first commence with swivels themselves and treat of them in the following rotation :—(1) Blued Steel : (2) Brass ; (3) Aluminium ; (4) German-Silver ; (5) Nickel-plated Steel.

Blued Steel.—All that can be desired in point of strength and color, but it is simply impossible to keep them from rusting and corroding the gut or other material of the trace joined to the eyes of the swivel ; for this reason I have condemned them, and never use them in any of my traces for sale or use, unless specially ordered.

Brass—Is very good, cheap and lasting, and quite strong enough for all purposes where large swivels are admissible, but where a fine swivel is required, as at the head of spoon-flies, &c., they are not strong enough, and I have often found them fail.

Aluminium.—I was induced to try these by what I saw and heard about the capabilities of this alloy in the Calcutta Exhibition, but on trial, they signally failed when tried by me.

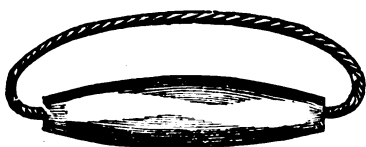
German-Silver.—My experience is that the same remarks apply to this alloy as to Aluminium, and they have also failed when tried by me.

Nickel-plated Steel (Plating as heavy as possible).—These are in my opinion, by far the best, strongest, and most reliable swivels of all. I have seldom lost a good fish, and in fact I cannot remember the loss of even one good fish through the breakage of these swivels where they have had fair play. All my traces are mounted with them, and they allow of finer swivels being used on the traces than any other kind.”

The above remarks will doubtless be found useful. Although I use smaller swivels on my traces for heavy fish than most anglers do, I have not had a single swivel fail since I have fished in this country. I attribute this solely to keeping the swivels well oiled and cleaned, and subjecting them to the grinding process described before. Of course I carefully inspect my swivels before use, and throw away any that appear much

worn—prevention being better than cure. Blued Steel swivels corrode the gut, but with wire traces are all that can be desired. I generally use nickel-plated steel swivels myself for preference, and the very best obtainable.

Leads.—I have myself never used any kind of lead whatever when spinning for Mahseer, and have always been able to work the spoon quite deep enough without the use of such, although there are many men who never fish without them. In fishing a pool, it is very easy to work the spoon from two to three feet under water and when trolling from a boat. In the fashion in vogue at Tangrôt, it will be found that, with sufficient line out, the spoon can be spun ten feet under water if required. I, moreover, think a lead is very likely to cause a foul, and is, in many ways, objectionable. If, however, one is attached, it should be done so by a *separate* thread, and on no account whatever should the line be passed through a hole in the lead as is so often done. A simple loop is all that is necessary, as



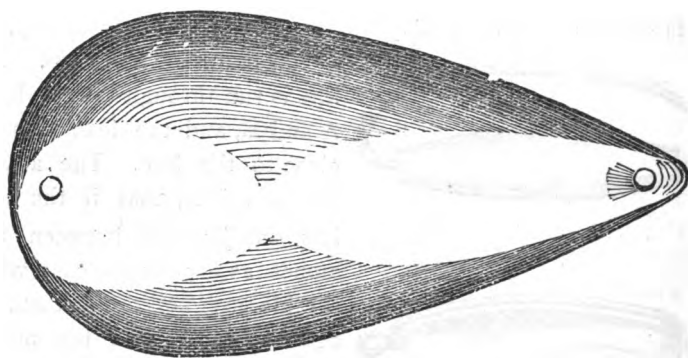
in the marginal sketches. The line is run through the two loops A and B, and the lead remains close to the line. The advantage of this is, that if the lead has got jammed between two stones, as is often the case, when the Mahseer sulks and starts off again; the lead in the meanwhile having sunk to the bottom,

the thread at once snaps, and the fisherman loses only a lead, worth, perhaps, a pice or two, instead of a costly trace and spoon, perhaps a 40 pounder, and invariably his temper. The thread fastening the lead should be purposely made weak so as to ensure its breaking before the line does in case of a foul as above described. This method is also by far the quickest and most convenient way of fastening the lead to the trace, as it can be twisted on and off the trace or line at any place desired in a moment. Thick pack-thread is perhaps the best material to use for this purpose.

In fishing with dead-bait it is occasionally necessary to use a lead in heavy water, but, as a rule, the weight of the hooks, swivels and line are sufficient to sink the bait as much as is necessary.

With dead-bait a lead can easily be arranged, so as to be put inside the mouth of the bait, where, of course, it is not conspicuous, and there is no danger of it fouling between stones or rocks.

Spoons.—For fishing for heavy Mahseer, a suitable sized spoon according to the size of fish expected, should be used. From two to four inches are the best sizes, but I think that a spoon of three or three-and-a half inches is the best all round, and sufficiently large enough for anything. One sometimes sees enormous spoons used, but I do not think they are particularly successful. As to the shape of the spoon, there are



many opinions, and the remarks, made in Chapter I, hold good here with reference to shape and colour, the best color of all being, I think, silver on one side and dull gold or brass on the other. However, in dirty water, a spoon silvered on both sides is often effective. Although a small spoon should spin with great rapidity and evenness, I do not consider this so necessary for the large spoon. Large Mahseer are often very lazy, and a spoon spun slowly seems often to tempt them before a very quickly revolving one. They natur-

ally imagine it to be a wounded fish, and, therefore, more easily to be seized and caught than an unwounded one. The above illustration of what I consider the best shape for a spoon of large size, and different sizes can easily be made up, the *shape* still remaining the same. Spoons of this description, up to four inches in length, can be made up by any good bazaar *mistri* for six annas or less, and one can silver them for himself with the "Argentine" described in Chapter I. The metal should be of a medium thickness, and not too thin. Having these spoons slightly hogged is an improvement, as they can then be made flatter, and they will more readily spin in slack water, or even when drawn down stream and across the current, in which position I have often taken good fish. With reference to mounting these large spoons, do not trust to split-rings. They are treacherous in the extreme, and even the best often snap without any apparent provocation. They are, however, very convenient in changing spoons, etc., and, for this reason, many use them. The triangles should be fastened to the spoon, and the spoon itself to the end swivels of the trace by a lashing of wire; copper being the best. Not many turns are required, and it is a thing that one's *shikari* or native attendant should be able to do with ease with a few lessons. One does not want to be continually changing spoons, and a couple of different spoons mounted with this wire fastening, should be sufficient; each spoon having its separate trace which is changed with the spoon, and a new trace and spoon substituted. The angler will find this method simpler and quicker in the end than split-rings and far safer; if he likes to be constantly changing his spoon, let him have half-a-dozen traces, each with its separate kind of spoon. See that the holes in the spoon are not bored too near the edge of the metal. This is a common fault with spoons made up by *mistries*, and unless they are cautioned, they will bore the hole just at the edges of the metal, and although I have never lost a fish by the hole wearing away, I certainly should have if I had not condemned the

spoon beforehand when the hole had worn considerably. Eaton and Deller's pattern spoons are much used by many anglers in India in preference to all others. It is a long flat spoon nearly equally broad at either end, and marked with scales on the back.

Referring again to the question of split-rings for mounting these large spoons—if the angler wishes to use them, I do not think there is so much danger if a split-ring is used with the top triangle, as with the bottom one. It is this (bottom or “tail”) triangle that the fish are mostly hooked on, and they can give a nasty wrench which is the cause of most split-rings breaking, and a split-ring for the top triangle is, I must allow, very convenient for taking off or changing the spoon. If a “flying mount” is used with these large spoons, a split-ring is almost necessary. A solid brazed ring is, however, very often used, and is preferable perhaps even to mounting with wire, but if used it should be seen that the join in the ring is firmly brazed.

A diagram of a spoon mounted with triangles, with wire instead of split-rings, is given on plate No. VIII.

As I stated in Chapter I, I am of opinion that large spoons, *i. e.*, those over two inches, should be mounted with “head” and “tail” triangles. There are many, however, who prefer the “flying mount” for all spoons both large and small, and for large spoons over two inches long, the mount should be of six thicknesses of gut to give it the requisite stiffness.

Triangles.—These should be made specially strong and solid. In fact, they are perhaps the only part of the tackle for Mahseer which require to be specially made. The ordinary Salmon rod, reel, and line do perfectly well for all Mahseer fishing, so does the ordinary treble-gut trace, and the spoon, as made for Pike fishing at home, but the ordinary triangle seen in England is useless for Mahseer. The Mahseer's power of compression is enormous, and although one seldom hears of a spoon being crunched up, although this even sometimes

happens, the spoon having been taken into its mouth at the required angle to get the leverage on it; one often hears of crunched and broken triangles which, no matter in what position they enter the fish's mouth, are always liable to this destructive process. Have, I say, strong, compact, powerfully made triangles in preference to large ones, and with large bends to the hooks. There is a great knack in selecting suitable sized triangles for a spoon. As I said before, I consider a large spoon should always be mounted with "head" and "tail" triangles in preference to the "flying mount" described in Chapter I, when treating on small spoons; and which is now so successfully and generally used. These "head" and "tail" triangles should not be the same size, the "head" triangle being somewhat smaller than the "tail" triangle. If this is not attended to, it will be sometimes found that the spoon will not spin at all, or at the most in a very erratic fashion. If so, this is entirely due to the triangles, which either are too heavy for the spoon, or else are not properly balanced. The greatest care should at all times be taken to see that the hooks are sharp and in good order.

Having discussed the above various articles of tackle requisite for heavy Mahseer fishing, I would point out before proceeding to give details for their capture by other methods than the spoon, that all the above-mentioned articles are absolutely necessary for a beginner to commence with; and I will here give a detail of the cost of the most moderate outfit for heavy fishing that a beginner can well commence with, again cautioning him that it is bad policy to trust to very cheap articles on which so much depends,—the spoon being the only article which has not got to stand a test of strength or lasting power; as I said before, its quality does not so much matter, so long as its color and shape is such as to induce the fish to seize it, which having done so, the work that the spoon has to do ceases, and the other parts of the angler's outfit are called into play. Above all things, have the very best reel and best hooks obtainable.

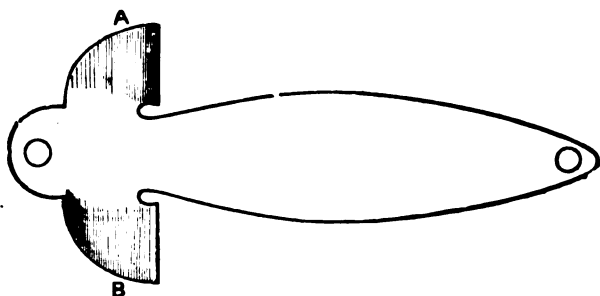
To commence fishing for large fish, the following outfit and gear would at least be required to begin with:—

				<i>Approximate Price.</i>	
				Rs A. P.	Rs A. P.
One 16 or 18-foot rod	30 0 0	to 49 0 0
One 5-inch reel as before described	25 0 0
150 to 200 yards of Line of Manchester Cotton Spinning Company's					
Line	12 0 0	to 15 0 0
If American or English Line	25 0 0	„ 30 0 0
Half-a-dozen traces, treble-gut, from	Rs 1-8	to 2-8	each, say		
(or if of wire much less)	12 0 0
Half-a-dozen spoons of sizes, 2 to 4 inches, with triangles.					
at tackle shop, say	12 0 0
If made up by oneself	5 0 0
Spare triangles, wire or split-rings as preferred, swivels and other					
sundries	10 0 0
				Highest Total	... 134 0 0
				Lowest Total	... 94 0 0
				or Approximately	... 120 0 0

Of course the above estimate can be lessened by picking up second-hand rods or reels, or spoons, but second-hand lines or traces are never to be depended upon and should always be regarded with suspicion. The above, as I before stated, is a low estimate, and does not include any tackle for live-baiting, or other methods of fishing, but it is hoped that it will give a general idea as to what is required to start on a trip with, say, to Tangrôt for eight or ten days, and I may say that the question "what kind and quantity of tackle do I want to go on ten days' leave to Tangrôt with?" or elsewhere, where large fish are expected, has often been asked me; of the six spoons I should have one 2 inches long, one 2½ inches long, two of 3½ inches in length. With reference to rods, a 16-foot one is sufficiently long enough and powerful for all general purposes, but sometimes when following a fish among large boulders and stones a long rod is a great advantage, as the line can be carried over rocks and other impediments that it would inevitably catch or foul in if using a short rod. As to other baits and

methods of taking Mahseer besides the spoon, I will go into them in detail as follows:—

Phantoms, Archimedean Baits, and other fancy imitations.—There are many of these manufactured and offered to the public, but the majority of them may be put down as fancy articles and quite unnecessary. For preference, a good soleskin phantom is the best, say from 4 to 5 inches in length. A large Devon Minnow should also prove killing, or any of the artificial fish baits made for Pike fishing at home. It may, however, be taken as a general rule that if the fish will not take a spoon they are not likely to be tempted by anything else, except natural bait, or perhaps *atta*. If, however, artificial baits are used, they should be strongly mounted. A Mahseer crushes up or damages an artificial fish terribly, and unless made of India-rubber, or some soft substance that will stand wear and tear, they are very expensive to use generally. An effective artificial bait, a diagram of which is herewith given, and which was, I believe, invented by Mr. R. S.



Bruère, a well-known fisherman, and member of the Fishing Club, is very simple, and is called the "Jung Bahadur." It is made of a *flat* piece of brass or copper, cut out as in above diagram. The two fins A and B are simply bent opposite ways; a hole is punched for your split ring or wire mounting, and the whole silvered, gilt, or left as it is, and is ready to be mounted with a big flying mount or head and tail triangles and to be used. The body is perfectly flat, and is not liable to be crunched up; only bent, when it can at once be straighten-

H

ed. The body part can be marked all over like a fish's scales, if preferred. I get these baits made up by a *mistri* for four annas, cut, stamped, and polished, but, of course, not gilt, or silvered. This spinner can be cut out of an old sardine box if nothing better is available or any other old tin box.

Spinning of Natural Bait for large Mahseer.—The directions given in Chapter I are all applicable to spinning for large fish, except, of course, the mounts and hooks must be heavier, so it is not necessary to repeat the details there given in this chapter. The best bait for spinning is a small Mahseer about 4 or 5 inches in length. Occasionally one gets an enormous "Chilwa" of quite the above length, and if so, such a bait for spinning is invaluable. I would, however, remark that spinning for the larger Mahseer with natural bait does not pay so well as spinning with light tackle for small fish, and one does not often see it adopted, in most rivers the spoon being a far more effective and killing bait.

Fishing with Dead-bait.—Fishing with dead-bait for large fish is often very effective when the water is colored, or a bit dirty, and in the spring more so than in the autumn. The method adopted is much the same as for fishing with a dead "Chilwa," as described in Chapter I., that is, as regards the mounting, etc. The bait for preference should be a small Mahseer from two to six ounces in weight; about three ounces is, perhaps, the best size. The mount should be composed of one very large single-hook and a sliding lip-hook above it adjustable to the length of the bait used. This should be mounted on a piece of treble-gut of any length, even a foot long or so being sufficient, and it should be attached by a fairly strong swivel to the running line. The big hook should be passed through the gills and inserted into the side of the fish and worked with finger and thumb in a downward and circular direction until the point emerges near the vent or tail; the lip-hook, which should be a powerful and large one, as the fish often gets hooked by this alone, is hooked through both lips from below.

This tackle is very simple, easily made, and not liable to any complication. The bait may be bound about with white thread behind the gills which will tend to strengthen it, and the gut being taken in with this binding, the fish will not be so liable to bend or double up. The lip-hook should be arranged so as to be very stiff, and only to be moved up and down with difficulty. A bait prepared like this will last a day easily; and that the fish are not particular about its freshness, the following anecdote will prove:—An angler, who had fished with one bait in the Jhelum for two days without success, threw the bait away (they were only to be procured with great difficulty). A native picked up the bait, then decomposed, and putting it on his line caught a fine fish scaling 47lbs. on the remains of it next morning.

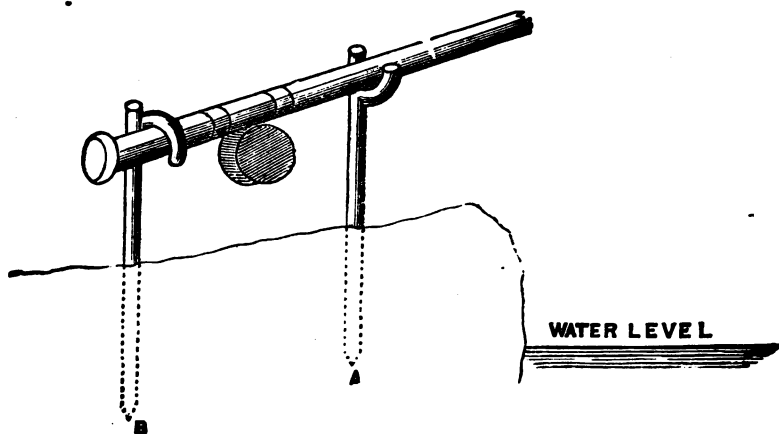
The above is as simple a method as any for mounting a dead-bait, but every one almost has his pet way. Two big single hooks whipped on gut are often used, or triangles! Another way is to take a large sized triangle mounted on a snood of treble-gut. To bait, a baiting needle is required, and the gut is entered at the *anus* and brought out of the mouth. The triangle is pulled close up, with the shank inside the belly of the fish. This is in fact the same method as described for spinning in Chapter I. A lead can be added and passed down over the snood if required, and then inserted in the fish's mouth and pressed down inside the body. In this way it will be quite invisible, and the mouth should be sewn up. Dead-bait fishing is, however, slow work, but then no one would attempt it for large fish except in dirty water unfit for the spoon. Dead-bait fishing with "Chilwa" for smaller fish is often exciting work, as one sometimes gets continual runs; but with a big picketed bait, these are not so numerous; but then when a fish does take a bait, say of a quarter of a pound, it is generally a "big 'un." A lead is optional, and the method of fishing is to cast the bait out into the deepest part of the pool, and letting it sink, leave it there. A convenient way of getting it out is for a native to swim out and drop it at the required spot, or, if one has a boat, to send it

out by boat and do the same. A bait of this kind is, perhaps, most effective, at the end of a run into a large pool, it can be let out from above and will sink in the slack water of its own accord. A diagram of this tackle is given on Plate No. 9.

Atta-fishing.—"Atta"-fishing for large Mahseer is practised in just the same way as before described, the best kind of hook being a large-sized Salmon hook—mounted for preference on treble-gut.

For large fish it is best not to use a float, but simply to cast the bait out into the pool. The way of putting the *atta* on the hook as described in Chapter I., of which a diagram is given, should be adopted.

For this kind of fishing, as, indeed, when fishing with dead-bait, it is often convenient to lay one's rod down on the bank while waiting for a run. If the rod is laid on the sand the reel is sure to get some sand or grit in it, which is very objectionable. The following plan is used by pike anglers at home and is very simple. Two iron rods are made—one bent like a crook, the other bent in such a way as to support the rod, as per diagram given. The iron rod A is first inserted in the ground



the rod B is then inserted about 18 inches behind the other, the butt of the rod passes over A and under B, the reel being

between them. The rod will balance all right like this and the reel will revolve freely. It is an inestimable boon to the bottom fisher, and saves both the reel and the rod. It is hoped the above diagram will make this clear.

Methods of spinning or trolling with the spoon or spinning bait.—

Fishing for large Mahseer is usually carried out in one of the following three ways—

(1) Spinning in a rapid, either from the bank or an anchored boat, or by wading.

(2) Spinning or trolling from a boat in motion.

(3) Casting from the bank or a boat anchored.

The first method is usually carried on as follows :—The boat is anchored at the top of the rapid, or the angler takes his stand on some projecting rock, or wades into the water till he has obtained a good position. The spoon is cast in and allowed to run down the rapid by degrees, two or three yards at a time, and then pulled up a yard or two, and so on. It can be so managed that the spoon plays in every portion of the water, and it is most important that it should do so. After sufficient line has been let out according to the length of the run, which may be from twenty to fifty yards, the spoon may be wound steadily up through the rapid without stopping, when it can be taken out at the head of the rapid, and the angler will prepare to repeat the same over again. It is a good thing to wind the spoon in, so that it will pass through some of the dead water at the side of the rapid, where, as a rule, there is an eddy, and the water sweeps round, and, indeed, for a short distance appears as if the current was reversed. In winding up the spoon, do not keep winding it up through the same line of water, but vary the path that the spoon takes through the water. It is often a good thing to cast out the spoon into the dead water or eddy on the furthest side of the river and to let the spoon swing round into the rapid.

(2). *Spinning or trolling from a boat in motion.*—This is as a rule in india called “chuckuring,” and is generally by far the most effective way of fishing. The boat can be rowed up or

down stream, or drawn by rope. The latter is the best way, as the water is not so much disturbed. Plenty of line should be let out forty or fifty yards—the mistake most men make is in not letting out sufficient line. The passage of the boat should be varied so as not to pass over the same water twice running, increasing or decreasing the distance from the bank each time.

At home this method of fishing is considered unsportsman-like, but in the large pools and rivers of India, it is often the only way that water can be covered, or fish killed. Personally I think it is exciting sport. The fact of the boat going one way and the fish the other way, increases the impetus of his rush, the line being perfectly taut at the time the fish seizes the bait. On hooking a fish one should land at once and play it from the shore, having the boat handy in case the fish may take it into his head to go down any rapid, or take out more line than the angler can afford. The observations in Chapter I. on this subject apply equally well to heavy as well as light fishing.

(3). *Casting from the bank or a boat anchored.*—This method with large spoons is not often adopted. I am referring to the kind of fishing as carried out in a pool or fairly still water, as done very often in fishing for smaller Mahseer. A large spoon is too heavy to adopt the overhead cast, as is done with a spoon-fly or light spoon. The rod would be strained, and, probably, broken. The cast is made as follows :—Sufficient line is drawn off the reel and allowed to fall in coils on the ground, or held in the left hand, the spoon or bait is pulled in till it hangs about six feet from the top of the rod. By a circular swing the spoon is then cast out, the impetus carrying out the spare coils of line. On the spoon falling on the water, it should be allowed to sink a little and then drawn in a yard or so at a time with the left hand, until it is lifted out of the water, and the angler prepares for a fresh cast. I would mention that in making this cast the point of the rod should not be raised more than eight or nine feet above the water or the ground as the case may be, in fact in swinging out the bait the rod should move almost parallel to the ground.

Playing a large Mahseer.—It is unnecessary here to give

further instructions on this subject, as all the remarks in Chapter I. apply equally to playing a large fish as well as to playing smaller ones.

Method of landing large fish.—For fish of any size over 7 or 8 lbs., it will be found that a landing net is not necessary. The usual way adopted to land a large Mahseer, is to draw him up as far as possible towards shore, and then the native attendant, standing over it, with both hands grasps the fish behind the gills and lifts it out on the bank. I do not think that I have ever seen a fish lost by any adept at this, and, moreover, directly the hand touches the fish, he seems to remain perfectly passive and does not struggle or kick, which at such a critical moment, if he did so, would render his capture much more difficult.

There are occasions when a gaff would be very useful, such as when a fish is hooked off a rocky ledge or precipice, which goes sheer down to the water, where there is no shelving bank to run the fish upon.

One, however, very seldom sees a gaff used out here, the reason being, I suppose, the difficulty in getting a native to handle it properly, and not always having the same men with you, even if one or two have been taught to do so. Also the scales of a Mahseer are so thick as to make the use of a gaff somewhat uncertain.

N. B.—Since writing the above, I have received a most excellent natural bait tackle from William Brown and Co., 42-George Street, Alerdeen; it combines a mouth lead and baiting needle, both easily detachable, and can be used as a dead or live bait tackle, or for spinning, for fish of all sizes. It is made in all sizes, and is called the "Marston combination, dead-bait, snap, spinning, and live-bait tackle." It is well worth giving a good trial,

CHAPTER A.

SUPPLEMENTARY CHAPTER ON FISHING TACKLE BY DR. CRETIN.

Rods.—All rods should have steel centre revolving Bickerdyke top rings, a red rubber button and partition bags. Wooden rods should be of greenheart. One should have a rod case. The winch fittings should fit both a 4-inch and a 5-inch reel. The prices of four different kinds of 16-ft. rods are given below:

Castle Connell by Enright, 16-ft. greenheart, in 2 splices, with extra top, snake rings, Bickerdyke top ring, wedge-fast winch fittings, red rubber button, £2.

Farlow's 16-ft. greenheart, in 4 pieces, with plain suction joints, extra top, short spinning top, snake rings, Bickerdyke top ring, universal winch fittings, red rubber button, well finished, £4.

Hardy's Hi Regan, 16-ft. steel centred, cane-built, in 3 pieces, with bridge rings, Bickerdyke top ring, universal winch fittings, lock-fast joints, red rubber button, cork handle, £10.

Hardy's 16 ft. greenheart to form a pair with the Hi Regan, all the joints being interchangeable, £5.

If only one rod be wanted, get either a Castle Connell or a Farlow. It is safer to have two rods, if one has two months' leave, and if one is going after big Mahseer; in that case, get both.

If expense be no consideration, get a pair of Hardy's rods. Let the cane rod have his universal elastic grip reel fastener and pneumatic cushion; and the greenheart rod his universal winch fitting and red rubber button.

Reels.—The reel should be easy running. It should be big enough to hold the line easily. To test its line capacity, the line should be wound in the same way as a fish is reeled in, that is, not carefully and regularly. Reels are usually made of brass or gun-metal, bronzed. Hardy makes them of Hercules metal,

which is much lighter. Little makes them of aluminium to order. It is the lightest but the dearest. Wooden reels and ebonite reels do not answer. The drum does not fit close enough, and bites the line, causing a foul. The side plate may be of ebonite or xylonite, but the rest of the reel must be metal. Get a leather case for each reel.

The five following patent reels are suitable for Mahseer. Malloch's Sun and Planet is like an ordinary reel, except that the revolving plate and handle remain stationary, when the line is being taken out. It is suitable for trailing from a boat and for bottom fishing, as the chance of a foul is minimised. Moscrop's reel is like an ordinary reel, but it ventilates the line, and it can be taken to pieces by the fingers alone, without the aid of any instrument. It has no screws.

For casting direct from the reel there are two kinds of reels. The first kind contains Malloch's casting reel only. It is *sui generis* and effective, but it has drawbacks. It is heavy ; it tends to kink the line, and will not fit ordinary winch fittings.

The second kind contains two reels. They both have a removable check, which, when put on, converts the reel into an ordinary check reel.

Slater's combination reel, $4\frac{1}{2}$ -in. wood and metal combined, with small metal axle, is suitable for small Mahseer, but is not strong enough for big fish. It can be taken to pieces by the fingers alone without the aid of any instrument.

Hardy's combined fly and spinning reel, $4\frac{1}{2}$ -in., of Hercules metal, with small axle, is better and stronger.

If only one reel be used, get a plain, revolving plate, check $4\frac{1}{2}$ in. reel $1\frac{3}{4}$ inch broad, bronzed, and 150 yards of line. Two reels ought to be taken, in case of accidents. In that case, get a 4-in. and a 5-in. reel, and two lines: one of 100 yards, the other of 200 yards. If expense be no consideration, the four following reels are recommended :—

Hardy's Hercules metal, revolving plate, $4\frac{1}{2}$ -in. check reel, bronzed, $1\frac{3}{4}$ broad, side plate ebonite, price 42s. 6d.

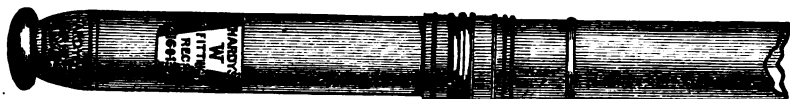
Malloch's Sun and Planet, 4-in. reel, 28s.

Little's Aluminium 4-in. reel, $1\frac{1}{2}$ broad, £3.

Hardy's combined fly and spinning reel, $4\frac{1}{4}$ -in., Hercules metal, small axle, $1\frac{3}{4}$ -in. broad, 4s. 6d.

The breadth is the inside measurement between the plates.

HARDY'S REGISTERED "WEEGER" UNIVERSAL WINCH FITTING.



Winch fittings.—There are two winch fittings, both of them good, on the Weeger principle, invented by the late Dr. Weeger of Brunn. The one described in Chapter I and figured in Plate 6, is now Warner's "Wedge fast" winch fitting. The other is Hardy's "Universal" winch fitting, a modification of which is his "Universal elastic grip reel fastener."

BRIDGE RING.

SNAKE RING.



Rings.—Mahseer rods should always have stand-up rings. The two best are : 1st the snake-shaped rings, which are both cheap and good ; 2nd Hardy's bridge rings, which are an improvement on the former, but are dearer. The great advantage of both those rings is that the line cannot get fouled. The first ring on the butt should be tied very strongly, and may be the pronged ring figured in Chapter II.

Wire traces.—For the purpose of making wire traces it is recommended that very fine steel wire be got from England, bronzed or Japanned yellow, to obviate rusting. Blued steel wire is thicker.

No. 000 wire-centred gimp the finest size, clouded, makes good traces for small Mahseer.

Hardy Bros. also make a kind of gimp which deserves a trial. It is called "Hercules steel gimp," and is made up of a

large number of very fine steel wires spun together. The two finest sizes are what is required.

Leads.—Kinking of the line is the result of twisting. In heavy water, to prevent kinking, a peculiar shaped lead is introduced between the spinning trace and the line. The peculiarity in the shape of the lead consists in the fact that the chief weight of the lead, or its centre of gravity, lies below the level of the line. A double swivel is put between the spinning trace and the lead ; thus :—

SPINNING TRACE.

DOUBLE SWIVLE.

LEAD.

LINE.

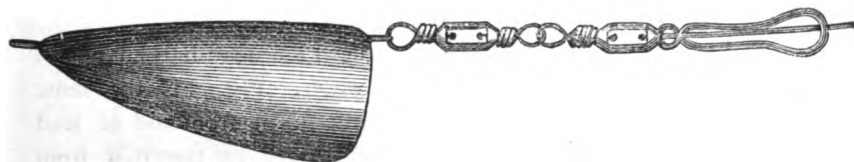


The following illustrations show the kinds of lead recommended. Get two at least, $\frac{1}{2}$ oz. & 1 oz. in weight,—

PENNELL'S SOLID HALF SUGAR-
LOAF-SHAPED SPINNING LEAD.



FARLOW'S IMPROVED PIPE-
SHAPED SPINNING LEAD.



LUSCOMBE'S ANTINK.

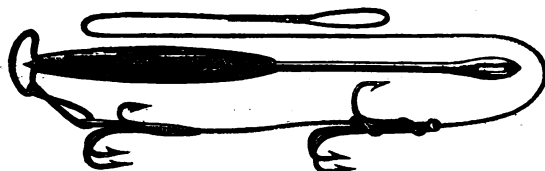
In an emergency any lead may be tied on the eye of the swivel nearest the line.

Hardy's patent "Marston" combination dead bait snap spinning and live bait tackle.

[Hooks should be specially made for Mahseer, stout and extra strong, medium size, mounted on clouded No. 000 wire-centre gimp.]

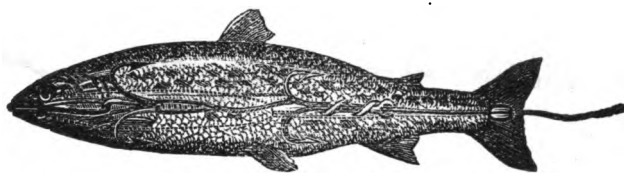
This tackle meets all the requirements of those who use fish as bait for any kind of angling, and is composed of a Jardine live bait snap, a body or trace lead, and baiting needle—three very useful articles in themselves, and when combined, or used together, fulfil every requirement for spinning, trolling, prawning, dead and live bait fishing. This tackle was invented by Hardy Bros., in conjunction with R. B. Marston, Esq., Editor, *Fishing Gazette*.

FIG. 1.



SALMON SIZE, NO. 2.

FIG. 2.



DEAD BAIT SNAP TACKLE.



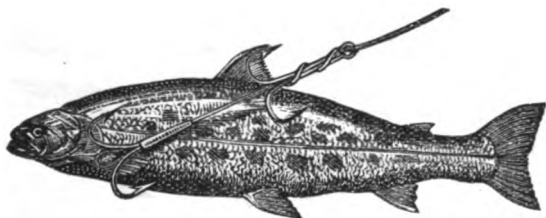
TROUT SIZE, No.

Fig. 1 is the tackle complete, as used for dead bait snap with the sink and draw motion in deep water. Fig. 2 is the same baited. To bait, screw out the needle until from end of lead to needle eye measures the same length as the bait from tip of nose to centre of tail. Insert the needle in the mouth of bait and thread, being careful to keep in the centre until the eye protrudes from tail sufficiently to admit loop of gimp or gut, passing through : then turn up the hooks, fixing the small one of the first set in the gill cover, and the small one of the

next set midway between tail and first one, and complete by making a half hitch round the root of tail with the gimp or gut, and pass loop through the needle eye. Another method is to take away the spring hook, baiting as before. The latter is the form recommended by "John Bickerdyke" in the book of "The All-round Angler," (Div. II, p. 86). Or it may be used as described in the first instance, but without the needle and lead, and threaded by passing the gimp into the body above second triangle through centre of tail, or instead of threading, throw a half hitch round the tail. This latter is very neat.

The great advantage over the old leaded gorge hook is at once apparent, as no separate baiting needle is required, and it is unnecessary to wait until the fish pouches the bait before striking; thus valuable time is saved, and undersized fish may be returned to the water.

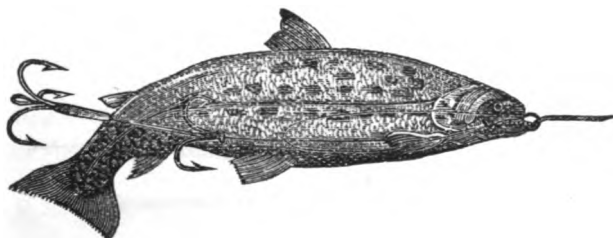
FIG. 3.



LIVE BAIT SNAP TACKLE.

Fig. 3 is the tackle detached from the lead and used as a live bait snap tackle, after the manner approved by Mr. Alfred Jardine, who speaks highly of it.

FIG. 4.

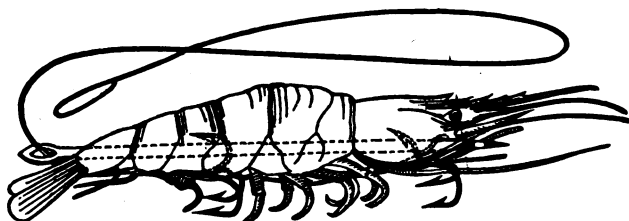


TWO KINDS OF SPINNING TACKLE.

Fig. 4 is the tackle used for spinning. The gimp, &c., is

passed in at the side above and rather behind the vent, and out at the mouth, by the aid of the needle, then threaded through centre of lead which is passed into the bait. The hooks should be drawn in by pulling on gimp, at same time pass a half hitch round the wire eye, and, if desirable, pass the gimp through the lips of the bait as well. In the case of a fresh gudgeon, this can be done without the aid of a needle. Baits with harder lips, however, will require a punctured hole made. Another method—pass the gimp under the gill cover and out at the mouth, stick the hooks along the back, as required to give correct spin, and place the lead as a trace lead some 18 inches to 2 feet above, or slip into the mouth of bait, and pass gimp, &c., through the wire eye. For quick baiting we prefer this method.

AS PRAWN TACKLE.



To Bait.—The needle should be inserted eye end first in the throat of the prawn, and carefully threaded along underside of body and through tail. The gut eye on tackle to receive needle end should be softened and set at right angles to hook before baiting. A little red silk binding round tail improves the wear of the bait.

FIGS. 5 AND 6.

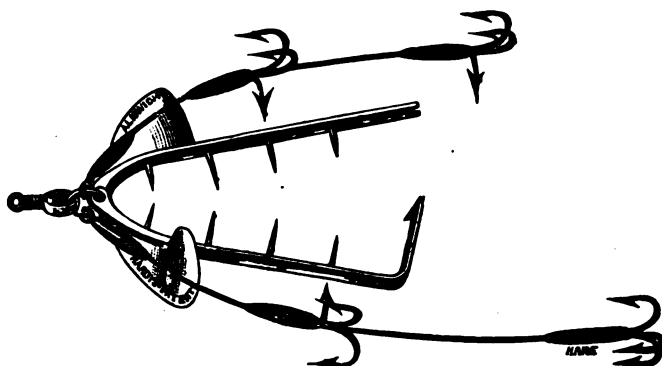


Fig. 5 shows the lead as used on the trace and fixed in position by a half hitch round the wire eye. Fig. 6, "the

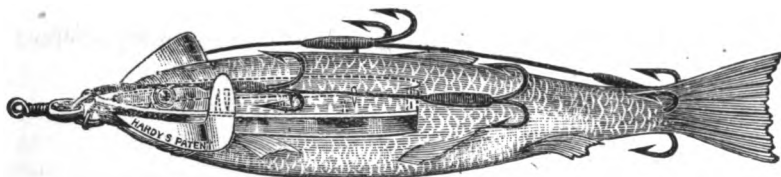
needle," requires no explanation, with this exception; to fix the gimp or gut loop to the needle ready for baiting, pass the gimp through the eye then over the point and draw up.

The following is a new spinner with the directions of the patentees.

Hardy's "Crocodile" spinning tackle.—For spinning natural baits either in salt or fresh water, is the simplest and most perfect made. It will hold and carry baits which are too soft to remain on other tackles, and requires no centre bar. Strong, simple, effective, and certain in hooking.



OPEN READY TO RECEIVE BAIT.



BAITED.

To Bait.—Open the tackle as shown in illustration, place the nose of the bait close to the hinge and press it upon the spikes until they are close, the end one coming quite through the body. Then bring down the other side in like manner, pressing it close, when the clips at end will engage. Press the double barbed spike on hooks into bait, and all is ready.

If baits are scarce, a piece from the belly of a Mackerel or a strip of Bacon skin will do. We have even taken Jack spinning the tackle without Bait.

To Remove Bait.—Press back the spike which goes through the body when tackle will open.

There are too many hooks, and they are not strong enough for Mahseer. Get it specially mounted for Mahseer, or else get it unmounted, and mount it yourself. Use one treble hook for the smaller sizes, and one treble hook on each side for the larger sizes. The most useful sizes are those made for baits between 4 and 6 in. long.

Similar remarks as to hooks apply to the Chapman and Archer spinners. When you are spinning in deep water, and you wish the bait to sink, use the spinners with a centre bar, and put a lead on it.

Artificial minnow.—I am fond of a minnow which I had made on a principle of my own. It is of metal, and shaped like a fish. It is hollow and perforated, and there is a lid that opens into the interior. I open the lid, stuff the inside with bits of fish, and close the lid. The object is to give the artificial bait the smell of live fish. In every other respect it is like an ordinary artificial minnow.

Gut rings.—Gut is usually fastened on to plain shanked hooks with silk. It requires a good workman to do it. It is troublesome, it takes time, it is liable to draw, and you want a supply



of hooks ready mounted. It becomes expensive in the end. The great drawback, however, is that you are unable to see the state

of the gut under the binding, and the loss of a fish may reveal to you in a painful way the rotten condition of things.

With a view of obviating those drawbacks, I always use ringed treble hooks and gut rings.

Anyone can make rings of gut. Soak the best salmon gut in water and tie the rings with the buffer knot. Have a supply of those rings of various sizes ready for use.

The gut rings are removable and can be advantageously removed after the day's fishing, in order to prevent the gut from drying in contact with steel, which may rust the gut. When used again, the loops of the gut ring may be placed at different points, as the loops are the spot where fraying is liable to occur.

To mount fly spoons.—At the head of the spoon have a solid brazed ring with a swivel and a ringed hook. For spoons between 1 and $1\frac{1}{2}$ inch, I use a single hook, like Luscombe's link hooks. The eye must be very strong. For spoons between $1\frac{1}{2}$ and 2 inch I use a treble hook, with a longish shank, like Luscombe's trebles.

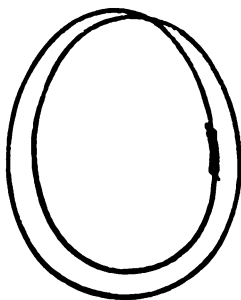
For the second or tail hook, I always use a treble mounted with a ring of gut. Having softened the gut ring in water, straighten it, then pass one loop through the eye of the treble and the other loop through the first loop; pull taut. Put the free loop through the solid ring, pass the mounted treble through the loop and pull taut.

The tail hook thus becomes mounted on double gut, which answers for spoons of $1-1\frac{1}{2}$ in. For spoons of $1\frac{1}{2}-2$ in., I double a large ring, and the treble becomes mounted in quadruple gut. The eye of the treble hooks might be plated with nickel, silver or gold; or silk might be wound around it.



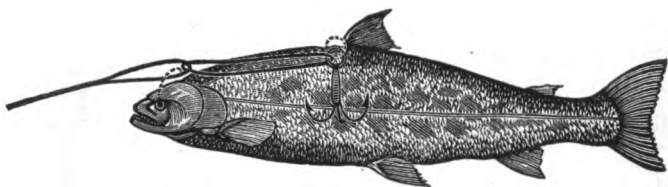
Other uses.—Rings of gut may be used for various other purposes. Archer's and Chapman's spinners can be mounted with them.

When the loop at the end of a trace or cast is too small, a gut ring of the required size can be attached. Double straight tied casts and traces are difficult and troublesome to make properly. An immense ring may be substituted. For instance, to make a 3-foot cast a ring of 6 feet is made; when pulled straight, it forms a double gut cast of 3 feet. The loop at each end can be attached to swivels.



Spinning flights for dead bait can be made out of them. A live bait can be picketed by their means.

Ledgering.—I picket a live bait in the following way, in dirty water. Take a gut ring, attach it to the loop of the cast and to a treble hook. Take a piece of cotton or gut, thread it through a long needle, pass the needle through one orbit across through the other orbit, that is from one side through the head to the other side. The needle should be insinuated between the eyeball and the edge of the orbit. Pass the thread through the loop of the cast, and tie it above or below the head.



If the bait has a thorn in the back fin, take another piece of thread, tie it to the ring of the treble, then tie the hook to the base of the thorn, so that the treble will hang on the side of the

bait. If the bait has no back fin, tie the thread to the shank of the treble, then tie the thread around the body of the bait, so that the treble will be against its belly.

For small chilwas, a single hook at the end of the cast is passed through the orbits.

I have kept fish alive for some days by stringing them through the orbits. On the other hand, baits hooked through the lip die soon from interference with their respiration. Hooks under the skin or into the flesh also cause speedy death. When the orbits are utilised, you can throw the bait a long way without injuring it, because the momentum is borne by the bones of the head. Injury of its eyes does not seem to interfere with the life of the fish. Only one hook is on the bait, which is quite enough for Mahseer.

The two following are spinning flies, one is on a single hook, the other on a treble hook. Always order extra strong treble hooks.



Spinning
Salmon
Fly.



Alexandra
or
Halcyon } Spinner.

Tussa Silk Lines—Are the best for bottom-fishing. They are strong and elastic; they will stretch both of their own length. There is no other line that is so elastic. They are twisted, not

plaited. Spliced to 20 yards of English silk plaited line, they make a splendid backing line in spinning for the smaller Mahseer. You can get them in Calcutta from Biswas in hanks of 80 yards (100 *hath*) for Rs. 2. The thick kind is what is wanted. Manton will get them made to order of any length and of any thickness.

Landing Net.—The best landing net is Hardy's Y-shaped collapsing one, 25 inch arms, with landing handle and net. They are made of wood, pack quite flat, and are triangular when open.

Bottom-fishing.—Hooks whipped in the ordinary way are apt to draw in India, or the gut is apt to rot. It is better to use eyed hooks, and to tie a fresh piece of well soaked salmon gut oneself, when the hook is wanted. The two following kinds of eyed hooks are recommended:—1st, Pennell Limerick single hooks with turn-down eyes and up-turn shanks, Nos. 4 and 7 Redditch scale, with returned eyes. 2nd, Warner's improved brazed eyed single salmon hooks, extra strong with turn-down eyes, Nos. 1 and 4. If necessary for weighting purposes, a little lead wire can be wound around the shank of the hook before the *dda* is put on.

The gut can be fastened to the hooks by any of the following knots—

The Figure shows how the gut is fastened to the hook when the eye is small, and the gut can go only once through it.



This Figure shows how to tie the knot when the eye of the hook is large, and the gut can go twice through it.





Worm Fishing.—The accompanying illustration shows the best kind of worm tackle, called the two hook worm tackle. The worm is hooked near one end on one hook and near the other end on the other hook.

Mahseer flies—Should always be mounted on eyed hooks.

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The Tod safety buckle should be used for fastening the strap of a creel. It is made by Gillett, 40, Fetter Lane, London, and costs 2s.

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CHAPTER III.

MISCELLANEOUS INFORMATION, NOTES, RECIPÉS, &c., REGARDING MAHSEER FISHING GENERALLY.

SEASON.—In India there is not much doubt but that March and October are the two best months for fishing in most waters, and on the whole, the spring fishing is the best ; but, of course, in different rivers the seasons differ according as to whether the water is affected by the melting snows. For instance, fishing in the Poonch after the middle of April is uncertain, and at times almost useless, at least for spoon fishing, as the river is swollen by the melted snows ; whereas the Mahl, only three or four marches distant, and in the same territory, is beautifully clear until the rains commence in July, and in fact March seems to be almost too early for this stream, as the snow on the hills near the Mahl melts very early. Again, in the small streams round Pindi, which are scarcely affected by snow water, fishing can be carried on almost all the year round. As a general rule, December, January, and February are blank months, but General Dandridge's wonderful bag made at Torbela in January, 1887, and recorded in Part II, shows that on occasions the fish will take ravenously even in the cold weather. This is, however, very rare, and quite exceptional, and, as a general rule, it may be taken for granted that there is no fishing obtainable during these months.

General Notes regarding Tackle.—In this country one must be constantly overhauling one's fishing tackle, varnishing, oiling, drying, and looking after it in a way not required in England. It is in this particular that many fishermen out here generally entirely fail. How often one sees a stock of tackle, all mixed and tangled up, put aside perhaps for months. The gut dries, the whippings of hooks become rotten, and the line perishes,

and then the angler is surprised at fish lost and numerous breakages. Every one should have a tin tackle case in which to hold all his things. Mr. T. P. Luscombe, of Allahabad, supplies excellent ones, but one can usually be made up by any good tinsmith to the pattern preferred, for a very small sum. It should have trays and partitions for everything, and should be big enough to hold a large reel, say a five-inch one. A wooden case should also always be used for one's rods, and which should hold landing or gaff handle as well. In fact it will be found that the whole of one's stock of tackle can be carried in these two boxes, and which are most convenient, portable, and compact, and will in the end save their original cost by the way the tackle is preserved and kept. One sometimes sees a valuable and perhaps a new Salmon rod, or a little ten-foot trout rod fresh from Farlow's shop, most delicately made and with all the latest improvements thrust into a bundle of tent-poles, or tied on along the side of a bullock cart, or to a load on a camel or mule, by some ignorant bearer or servant, the owner not troubling to inquire about it, as to how it is packed or placed, but expressing great surprise a few weeks later at the rod having warped, perhaps a joint cracked, or a ferrule become loose, doubtless, abusing the maker; whereas, with careful packing, none of the above defects would have happened for years. Again, how often one sees a rod with the whippings of the rings all loose and frayed, and which necessitates generally entirely re-whipping, which would have been prevented if the whippings had been done over periodically, say twice a year, with almost any kind of varnish, the best being made of shellac or sealing wax dissolved in spirits of wine, or a bottle of this stuff ready made can be bought from almost all the Indian tackle shops for about a rupee. A bottle of Walter Locke & Co.'s (Calcutta) "Fisherman's Varnish" is invaluable. Every six months or oftener, all rod whippings should be done over with it, and all hook and swivel whippings and heads of flies touched up. It preserves the whipping, which is not exposed to the air, strengthens it, and smartens the tackle

generally. The fisherman at home is, as a rule, far more careful in these matters than his Indian brother, although at home the climatic influences are not so hurtful, and tackle is cheaper and more easily procured. One is often asked what is the best way to keep rods in this country, which is not any easy question to answer ; our own experience is that the more they are exposed to the air the better, and have found a small rack, similar to a miniature gun-rack, fastened to the wall the best method of keeping them, each joint having a separate place. They can thus be inspected from time to time, and any defect noticed at once repaired. An occasional rubbing in of linseed oil is advantageous, and a fresh coat of varnish should be given from time to time. Top joints should be suspended to a nail by a loop, or the top ring.

The instructions given in Chapter I regarding the drying of lines should be carefully carried out.

It is wonderful how soon a line becomes rotten when this is neglected. Old lines may be redressed with advantage, and recipés and detailed instructions for this will be found at the end of this Chapter.

The notes regarding the constant oiling and preparation of swivels are important, and, as before stated, a swivel prepared in the method before described, is worth of three or four swivels in the rough. As to hooks, it should always be noticed before using them whether they are sharp and every way perfect. Many fish are lost owing to inattention to this point.

Very often one sees a reel used on a rod not having proper sized winch-fittings to secure it properly, and, becoming loose, the reel falls off, perhaps into deep water at one's feet, and at a critical moment, the angler endeavours to pull it in, but the more he pulls the more the reel unwinds, and until all the line is pulled off, it cannot be raised. All know, who have had this accident happen to them how aggravating it is. It can be easily prevented by cutting a slip of leather, the same size as the plate on the reel, which is held by the fittings, and putting it underneath, when the chances are that it will be held suffi-

ciently tight ; of course if the fittings are too long or too short, either they, or the plate on the reel, must be altered.

How important it is again to see that one's reel is in constant order, and kept slightly oiled with the finest gunlock oil. The check-springs and cog-wheel should be occasionally examined and cleaned, for, if not, after a lot of use a collection of filings, and minute bits of steel will be found ; and which, at a critical moment, may clog the action and prevent the reel from revolving properly. I have even heard stories of anglers losing the whole of their line and a big fish, by not having secured the end of the line to the spindle of the reel, or at all events by an insecure and inefficient knot ; which "pulled out" or became undone on being subjected to a sudden strain. Such gross carelessness as this, however, should meet with the fitting reward above described, *viz.*, the loss of the whole line and a large fish ; after which it would not be likely to happen a second time.

I will now proceed to treat about that much abused and badly-treated article in this country, *viz.* :—

Gut.—It is wonderful the number of times one hears of a fish being lost because the gut was rotten. Would it not, in nine cases out of ten, be more strictly correct to say, because "I did not take the trouble to examine it, or prepare it properly by soaking it before use." We think it would. I may perhaps be prejudiced in favour of gut, but I almost entirely disbelieve in gut absolutely getting rotten. It dries up, and doubtless *seems rotten when in this condition*, but it can generally be rendered as good as new by judicious and sufficient soaking. The whippings become rotten and often break, on account of not being looked after, and the gut is made to bear the blame ! All gut traces and casts should be put between the folds of saturated flannel, at the least the *night before*, and into water at least half an hour before use. Old gut that has long been disused should be softened and rendered pliable *gradually and by degrees*, and not plunged into water at once. Plunging old gut at once into water is too much for it ; if it is put between the folds of damp flannel or cloth, the fibres will gradually be relaxed and swell,

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and the gut will eventually attain its old power and pliability. A small portable India-rubber bucket is a very useful article. The gut can be put into it between damp folds of flannel, and when actually fishing, the traces required for use can be put in water, kept in it for the purpose.

Again, in tying a loop to the end of a trace, or in doing anything in the way of mounting hooks on gut, or making up a trace, it is most important that the gut should be soaked, and even in attaching a hook the end of the loop to the gut will sometimes crack and split, if not made pliable first. In preparing strands of gut for a trace, or for mounting hooks on, how seldom, in this country, do we see the end of each piece singed in a candle, which instructions were given by good old Isaack Walton over two hundred years ago. The result of singeing the gut is that a tiny knob, or swelling, is formed at each end of the strand, and this is most important when whipping on hooks, as it prevents them drawing.

As to the best colour of gut, many advocate it dyed blue. However, in our opinion, white undyed gut is the best, as it is transparent, and must be much the same color as the water and the sky to a fish looking up from below. However, gut dyed to various colors is everywhere procurable, and if the angler wishes to color it himself on the spot, he can do so by the following means :—

(1) To dye gut *green*.—Boil a strip of green baize, dropping a small piece of alum into it, and then steep the gut in the warm liquor.

Blue.—Warm some ink and soak the gut in it, but do not let it stay too long. It can be stained to any degree of colour, according to the time it is soaked.

Gut is also very liable to get eaten into by the rust on swivels made of steel, and this is an objection to using swivels of blued-steel. This happens at the bends of the gut round the rings of the swivels, and should be carefully watched for. It is in fact a good thing to test one's gut traces, before use, but *after* they have been soaked, by pulling steadily on them, until

a fairly heavy strain is established. There are other recipes for staining gut besides the above. A strong decoction of tea well boiled will stain gut. In the recipe given above for staining gut by ink, it is advantageous to add water to the ink or the stain may be too dark. Some boil the ink, and I think it is improved by so doing.

The question is often asked—"What is gut made from?" I have been informed by a friend, a well-known angler, that it is not made actually from the gut of the silkworm, but from two small organs situated within the body of the worm. These organs contain the silk before it is developed or has been spun by the silkworm. Great nicety is entailed in taking the worm at the proper time, otherwise the gut is useless. The worms are thrown into vinegar and there left for some hours. This process kills the worm and solidifies the organs. These are now taken out of the worm, and are pulled out as far as they will go from end to end. These organs thus extended, being in fact the "gut," are now left to dry. They are in this stage more or less rough and stringy, but are polished and finished off with some soap and a little soda. According to the size of the organs, so depends the thickness and length of each strand of gut. The strands are then sorted and laid out according to thickness. Gut is, therefore, nothing more than solidified silk; thick gut is doubtless made from larger worms which are difficult to obtain, and hence the cost is much increased. "Drawn" gut is very fine, and is made by scraping it down and drawing it through a gauge or standard. With this, however, we do not have to trouble ourselves much in India; in fact, the angler's chief difficulty out here is to obtain gut of sufficient thickness and good quality, except for very light Mahseer or trout fishing.

The Manufacture of Silkworm Gut.—Messrs. S. Alcock & Co., of Redditch, have published a very handsome pamphlet on the manufacture of fishing tackle, portions of which will be of great interest to our readers. An interesting section dealing with gut says:—

"This is, perhaps, the most curious and interesting of the many departments in the manufacture of fishing tackle. All

anglers make use of silkworm gut, but large numbers are quite ignorant of its origin. In some parts of the kingdom it is still called Indian weed, and looked upon as a species of grass, and any attempts to prove its being really the entrails of an insect are derisively resisted.

"The worms are bred by the country people in their cottages, which usually consist of but two rooms on the ground floor. In some of the villages near Murcia, in Spain, this is the sole occupation of the people, some of whom only rear the worms while others also perform some of the initial stages of gut making. On one side of the living room of these cottages, the worm breeder ties together a number of bamboo cane reeds, forming a bed from twelve to fifteen feet long by four feet wide, and raised from the floor about four feet. The worms are spread all over these beds and are fed five times daily, by covering them with mulberry leaves.

"Before feeding, all the dead and sickly worms are picked out, so that the others are left in a healthy state. They are kept about fifty days, during which time they sleep twelve days.

"When they are ready to spin the cocoon, they creep upon branches of small trees, which are placed over the cane bed. They are taken off, killed by being put into vinegar, where they remain for six hours, and then into water. The worm is then broken in half, exposing one, two, or three yellow sacs, the ends of which are taken between the thumb and finger and pulled out as long as they will go, care being taken not to flatten the gut in so doing. When a sufficient quantity, say two or three thousand, is drawn, it is tied in bunches, and hung up to dry in the yard or garden. Some worms produce one gut, some two, and a few three. It is afterwards sold by weight to the gut finishers. The latter steep the gut in hot water, with soap and a little soda when the outer skin or film comes off easily. It is then washed, bleached and hung up in rooms to dry. Girls are employed, who place each strand between their teeth, holding the other end between the thumb and finger, and rub it with wash leather. It is then sorted according to strength, thickness, and length

into the various qualities, re-rubbed and tied in hanks of one hundred, and again into bundles of one and ten thousand for sale.

"Gut is usually classified under the following heads, *viz.* :—Refina (very finest), Fina (fine), Regular (medium thickness), 1st and 2nd Padron (thick or strong). Marana, Imperial, and Hebra are very thick and strong, for salmon fishing. Gut varies in length from six to eighteen inches, and is made in three qualities—Corta (or common), Estriada and Superior.

"In making up the better qualities into casting lines or leaders, the greatest care is taken in picking out the best strands; and not a little skill and experience is requisite in making the necessary knots. All the best casts are stretched, and their weight-bearing qualities tested, so that, in spite of their fragile appearance, they are capable of supporting a heavy strain.

"The breaking strain of salmon gut when made into casts is as under :—

Sizes	1/5	2/5	3/5	4/5
Strain	15	12	10	9lbs.
Lake and Trout Casts :—						
Padron.		Regular.		Fina.		Refina.
8		7		5		4lbs.
		IX Drawn.		3X Drawn.		
		3		1lb.		

The above is for casts tested quite dry, but if soaked in water for a short time, they will stand a greater strain.

"The shorter lengths of the various qualities are used for "tying on" hooks with fine strong silk. This work is the object of constant supervision, as the greatest importance attaches to the rigidity and firmness with which the hooks are tied. For convenience in carrying these gut hooks, the best qualities are supplied in the wrapper patented by S. Allcock & Co., by which the hooks can be removed singly as required, without disturbing the remainder.

"In order to meet the constant demand for a fine and practically invisible gut for casts, &c., quantities of the gut, as received from Spain, are subjected to a further operation, which consists in passing, or 'drawing' each strand through exceedingly minute

holes in a steel plate. This supplies what is termed 'drawn gut,' or, in France, 'English gut.'

"All classes are stained various shades, to suit different coloured waters.

"Gut can be truly called the angler's friend, besides which it is now being largely used in our hospitals for surgical work, as it is found to assimilate much better than silk."

Making up Tackle, Mounts, &c.—A great deal more in this direction might be done by sportsmen themselves, than is usually the case out here. It is so wonderfully convenient when out on a trip to be able to do odds and ends for oneself, to say nothing of the expense saved—all my single gut traces I make up myself, also all mounts, whether for spoons, dead bait, or anything else. All such jobs, as ringing a rod, fitting on new ferrules and counters, splicing a joint, mounting spoons, etc., should all be done on an emergency. It is often surprising, with little care and instruction, how clever natives often get in this kind of work, and of what use they are.

Sundries.—Every angler should have an assortment of the following sundries to guard against accident and disappointment, in addition to the articles roughly detailed in the two lists given previously:—

A supply of swivels of various sizes.

A few split rings (for small spoons and also for large, if preferred).

Two or three baiting needles of sizes, and disgorgers.

Spare sinkers (if used).

A pair of small pliers.

A pair of small scissors.

Split shot.

Spare rod rings.

Spare top rings (revolving steel cored, as before described).

Cobbler's wax—real English.

Gimp.

Annealed wire, copper or brass, often useful even if not used for traces.

Silks of two or three thicknesses.

Spare gut.

Spare hooks, unmounted.

Silvering cream ("Argentine.")

Hook or whipping varnish.

Spare floats and float caps.

A small vice.

A twisting machine.

A steel-yard or weighing machine.

Spare ferrules and counters.

A clearing ring for bottom fishing.

Spare cogwheels and springs for reels.

If the angler goes in for fly fishing and ties his own flies, the above list of sundries will be much increased.

It is bad policy, and more expensive in the end, not to have a sufficient supply of the above articles always ready for use.

Wax.—For whippings there is nothing better than the ordinary English cobbler's wax, an article not often seen out here. It is, however, procurable from most of the tackle shops in small boxes at one or two annas a piece. A small piece required for immediate use should be kept in the folds of a piece of parchment, which can easily be put into the small pockets of a fly-book, and, if kept in this method, it does not stick to every thing, like a small box of it does, as from a box in hot weather the wax oozes out on all sides. A good recipe for wax is as follows:—To two ounces of best yellow resin in powder, add one drachm of white beeswax sliced in minute pieces; put in a small jar or pipkin which place in a saucepan of boiling water taking care that the water is so shallow as not to mix with the resin and wax. With a piece of stick, stir until both the ingredients are thoroughly dissolved. Then add $2\frac{1}{2}$ drachms of fresh lard, and let the whole simmer for ten minutes, stirring often; then pour into a clean basin of cold water, and, whilst warm, pull the wax and knead it with the fingers till nearly cold to give it toughness. Make up into small balls and keep in a tin box.

Ordinary cobbler's wax may be dissolved in spirits of wine

till it is the consistency of butter. To dissolve it, put a small piece in to a gallipot, with a very little spirits of wine, and tie a piece of bladder over the mouth of the gallipot. Then put the gallipot into a cup of warm water, and set it near the fire until dissolved. For waxing a large quantity of silk, or cord for whippings, such as for a splice, etc., it is often convenient to dissolve cobbler's wax. The cord or silk can be at once dipped in it, and will be in this way more effectively saturated than by simply drawing it through a piece of the wax.

Weighing Fish.—The angler will find a small Salter's spring balance weighing up to 25 or more pounds as required very useful. It is as well to get a 60-lb. balance at once, as it is a most useful article for weighing coolie's loads, parcels, and other things. Supposing, however, that you catch a fish too heavy for your spring balance to weigh, the following plan may be adopted:—Take your landing net handle or other stick, fix two strong loops to each end. Then secure the fish to the *centre* of the stick, make an attendant hold one of the loops (at either end) and at the same time apply the spring balance to *the other end*. Raise the whole up so that the fish's tail is clear of the ground; double the reading on the balance, which will be the correct weight. If the above is not plain, it will, by a little thought and reasoning, doubtless be so. Care must be taken to have the fish secured exactly in the centre of the stick, otherwise it will be inaccurate. If the fish be suspended not in the centre but nearer the end to which the balance is applied, the reading will be more than half the fish's weight, whereas if it is suspended nearer the end held by the assistant, it will be less the result when doubled, giving a proportionately greater inaccuracy either way as the case may be. Again, in the absence of a weighing machine, the following formula and calculation will be found practically correct:—*First*, take the length and girth of the fish in inches; add together the length, and one-third of the length; multiply the result by the square of the girth, and divide by 1,000, and the result will be the weight of the fish in pounds. For instance, a fish is 45 inches long and 24 inches

in girth, add to the length 45, one-third of the length, *viz.*, 15—the result is 60. Multiply this by the square of the girth which is $(24 \times 24) = 576$. The result is 34,560. Divide this by 1,000. The answer is the weight of the fish in pounds.

The fraction need not be taken into account, and it will be found that a fish of the above measurements will weigh very nearly 34 lbs.; perhaps a pound more or less, but very near it. I have tested this with fish of all sizes up to 61 lbs., and it has proved to be, in every case, nearly correct. Of course the measurements will be taken differently by different people. The length for this calculation is taken from the mouth (closed) to the end of the tail; and the girth is that of the thickest part of the fish's body. Up to 50 lbs. this calculation should always give a result within 2 lbs. of what the fish's weight is when tested by a steel-yard, the tendency being to be a little in excess of the actual weight than under it. Even when a large fish is to be weighed with a steel-yard, it will be found that, unless done at once, the fish, *i. e.*, one of 30 or 40 lbs., will lose 2 lbs. or more by drying, and unless a fish can be weighed directly he is taken out of the water, it will be found that this calculation is practically as accurate as a weighing machine.

I do not know on what this calculation is based, or whether it is merely a mathematical coincidence, but the result speaks for itself. I saw it years ago in an old fishing book at home, and on coming to India I applied it to the Mahseer, and found it to answer admirably. As I said before, the tendency is rather to give a result over than under the actual weight of the fish, and in measuring, if anything be under than over your measurements. You can measure a big Mahseer in several ways. First, the upper lip, particularly of a male fish, can be pulled out two or three inches. This is I consider an unfair measurement. Also the tail should not be closed when measuring for the data for this calculation. It should be expanded or stretched to its full extent as if the fish was swimming.

Packing and Carriage of Fish.—Anglers often wish to send fish into cantonments to their friends, and sometimes they arrive

in a state of decomposition, owing to the following precautions having been neglected. First of all, a fish of any size, if not very severely hooked, can be kept alive for days by being tied to a post or boat by a rope fastened through the gill. Perhaps a delay of two or three hours will take place in getting a coolie; the fish, therefore, should be kept alive till ready to start, by being tied up to the bank or boat as before described.

For instance, at Tangrôt fish have often been caught in the morning and sent to Lahore or Rawul Pindi, even in fairly hot weather, by the following arrangement:—

The fish is kept tied up all day until the evening, it is then taken out and sent off to Dina, the nearest railway station, in time to catch the midnight train, and the fish arrives either at Lahore or Pindi by 8 in the morning. (The trains going either way and both crossing each other at Dina). Now, if the fish had been sent off directly it was caught, it would, in all probability, have gone bad during the heat of the day, and arrived at its destination unfit for food. The most important thing of all is that directly the fish be taken out of the water to be killed and started off, it should be at once disembowelled and cleaned, but not with water, a bundle of grass and a dry cloth being the only things used. The inside should then be sprinkled with charcoal and salt alternately. In England, stinging nettles are much used to pack fish in, and they greatly preserve their bloom and freshness. I do not know whether the English stinging nettle is to be found in India or not, but perhaps some of my readers who are botanists, might know of some plant with similar properties, and which might prove an efficient substitute. In the absence of stinging nettles, the fish should be packed in long grass.

Records of Fishing Expeditions.—Nothing is more satisfactory or valuable than for an angler to keep up a regular fishing diary of the whole of his fishing career in India. Not only is it often of great use to others, but a pleasant hour or two can often be spent reading over one's records, and which often recall to memory happy days gone by and friends far separated,

and with whom it will never be our luck again to fish or shoot in India. A diary to be of use should contain full information as to locality, description of fish baits, different kinds of spoons, flies, etc., used, and all general remarks giving the dimensions of any very large fish caught, and any other particulars that may be of interest, such as whether the fish is a male or female, and any other notes. Also a brief description of the locality or river, together with all information regarding roads, supplies, carriage obtainable, camping grounds, etc., should be recorded. The form given below will be found to be perhaps the most convenient, and to contain room for all information. No separate column is given for description of fish which, in nine cases out of ten, are Mahseer. If any other kinds are caught, a note of the description can easily be made in the column of remarks:—

Date.	Weight.	River.	Place.	How Caught.	REMARKS.

Notes on Purchasing Tackle.—There is no doubt but that it is much cheaper in the end to get tackle from England straight out, but this is often inconvenient to those who may require to have it in a hurry. The great thing in purchasing tackle is to send the order, whether to shops out here or at home, *in plenty of time*, to allow of the consignment of tackle when received being returned in case of any articles being

wrong and the article exchanged; of course, I do not mean the whole consignment, but very often among a lot of things, no matter how carefully the order may have been worded, and also attended to, by some misunderstanding or wrong nomenclature, an article is received that is not quite what it was intended to order.

If, however, there is time to return and exchange it with a fuller explanation, it will doubtless be received right the second time.

It would perhaps be invidious to compare the merits or prices of the different firms who supply tackle in India, but Messrs. T. P. Luscombe, of Allahabad; Walter Locke & Co., Calcutta (late Walsh, Lovett & Co.), Agents for Alcock and Co., of Redditch; Messrs. Manton & Co., Calcutta; Messrs. R. B. Rodda & Co., Calcutta; and Messrs. Scott & Co., and Long & Denny, of Rawulpindi and Murree, are, perhaps, the best known. Messrs. T. P. Luscombe manufacture tackle, repair rods, etc., themselves, and have workshops for the purpose on their premises. They also make up rods, reels, mounts, etc., to order as required, as also do Messrs. Manton & Co., of Calcutta. Of the best makers to go to at home I would recommend the following:—Charles Farlow & Co., 191, Strand, London, W. C.; Eaton & Deller, 6 and 7, Crooked Lane, London Bridge, E. C.; G. Little & Co., 63, Haymarket, London, S. W.; Alfred & Son, 54, Moorgate Street, London, E. C.; Carter & Peck, 137, St. John Street Road, London; William Brown, 42, George Street, Aberdeen, etc., etc.

The following addresses may also prove useful:—

BISWAS & Co., 1/1, Mission Row, Calcutta.

OAKES & Co., Popham's Broadway, Madras.

HARDY BROS., Alnwick, England.

J. ENRIGHT, Castle Connell, Ireland.

P. D. MALLOCH, 209, High Street, Perth N. B., Scotland.

The two following are wholesale only:—

W. BARTLEET & SONS, Abbey Mills, Redditch.

J. WARNER & SONS, Hewell Works, Redditch.

The Overland Parcel Post is a great boon to anglers, and almost every kind of tackle, except rods, can be sent by it.

Varnish for Fishing Rods.—First clean the rods thoroughly with spirits of turpentine and use a varnish made of gum shellac and spirits of wine, made into the consistence of ordinary varnish. A piece of cobbler's wax, about the size of two walnuts, should be added to each half-pint of the varnish made. This varnish should be lightly rubbed over the rod for six consecutive days, and in a day or two afterwards it will be ready for use.

Dressing for Lines.—(1)—Dip the lines in linseed oil. Extend and dress off all superfluous oil by passing it through the thumb and finger. Wind it on a frame and repeat the dressing once or twice within a fortnight's interval. Three weeks after the last dressing, apply some mutton suet by passing the extended line between the fingers, which hold a piece of raw mutton suet. The friction will melt the fat sufficiently to cause it to adhere to the line, which must afterwards be rubbed down with flannel. (2)—Or take of boiled linseed oil, one pint; beeswax, $\frac{1}{4}$ lb.; and melt the wax in the oil. Soak the lines well in the mixture, and when well soaked, wind on a wooden frame, stripping the superfluous matter off between finger and thumb. Hang the line up to dry in an airy place. If, at the end of each season, the end of the line most used be dipped into this mixture, it will last for years. (3)—Or, again, take half a pint of boiled linseed oil, a piece of beeswax about the size of a walnut, twice the quantity of pitch, and a tablespoonful of copal varnish. The procedure is as before described, care being however taken not to immerse the line into the mixture when it is too hot. It will take some little time to dry thoroughly. A small piece of India-rubber cut into shreds and dissolved in any of the above mixtures will greatly improve the dressing, which, when once made, should be kept for use in a wide-mouthed bottle, such as a pickle bottle, and well corked. With any of the above dressings, great care must be taken that the mixture is not

too hot when the line is immersed in it, or it will be burnt and rendered useless. A line also takes a long time, three weeks or more, to dry, so that the angler should waterproof his lines at some other time than the fishing season

The following is a recipe for waterproofing or dressing lines, kindly given me by Mr. C. T. Dolby, a member of the Fishing Club. This gentleman states: "I have used this for several years on my tusser lines, and have found it to act very well. In any case it prevents the line from perishing. As an experiment I have tried a thin piece of cloth with this solution and have held water in it for several hours without the slightest signs of moisture appearing on the outside. This recipe appeared in a periodical, entitled the *Scientific American*, in 1876. I find that the waterproof substance used on the American and other lines, tends to perish the line very quickly."

"The following is the recipe:—

Lawry's Process.

Soap	2 ounces.
Glue	—	4 "
Water	1 gallon.

Soften the glue in cold water and dissolve it together with the soap in the water by aid of heat and agitation. The cloth is filled with this solution by boiling it in the liquid for several hours, the time required depending upon the kind of fibre and thickness of the cloth. When properly saturated the excess of liquid is wrung out, and the cloth exposed to the air until nearly dry; then digested for from five to twelve hours in the following:—

Alum	13 ounces.
Salt	15 "
Water	1 gallon.

It is finally wrung out, rinsed in clean water, and dried at a temperature of about 80° Fahrenheit."

Another good recipe for waterproofing is as follows :—Mix copal varnish and gold size in proportion, 10 parts copal varnish to 1 part gold size. Soak the line in this for three or four days. Dry the line ; it will take a fortnight or three weeks to dry.

To keep flies from the ravages of insects.—Anglers are often annoyed at valuable flies being destroyed by insects. The following recipes for preservation of the same are taken from a late "Field," and should meet all requirements, even in India.

No. 1.—"The first requisite is to keep the flies in a well-closed box. The ordinary fly-book offers too easy an entrance to the enemy. If Keating's insect powder has been tried and found to fail, I strongly recommend naphthaline or albo-carbon. Melt a little into lumps of convenient size, and put one, wrapped in a bit of muslin, into each box. It may be well to secure a fair start by putting into the box, in the first instance, a piece of lint dipped in benzine ; this will ensure a "happy despatch" for any insect life that may be lurking among the feathers, and may be removed after half an hour."

No. 2.—"Naphthaline crystal efficiently protects salmon flies from the ravages of insects. In using it there is no more convenient plan than to fill an ordinary pill box, and cover it with a double layer of muslin instead of the lid. The crystal is not expensive, and can be bought of almost all chemists. The box should be replenished every few months, as the crystal evaporates. It is far better to keep the flies in a tin case, than in an ordinary fly-book."

No. 3.—"Keep your flies flat between layers of silver paper in a close-shutting tin box. In years of experience, I have never known moth to penetrate this. If the tinsel gets tarnished rub it gently with a piece of soft wood wedged off to a point with a little plate powder, and it will become again as bright as if new. But in both instances exclusion from light and air is the main point."

No. 4.—"Corrosive sublimate dissolved in alcohol will answer the purpose perfectly. This mixture was used by the

late Charles Waterton for preserving his bird skins, without injury to the most delicate colours. The amount of the sublimate to be used can be determined by dipping a black feather into the liquid, on which, when dry, no white powder should remain. The flies need only be dipped into the preparation, and then allowed to dry. The only drawback is the extremely poisonous character of the mixture. I do not know what effect the spirit would have on the gut, but, if carefully done, it need hardly come in contact."

No. 5.—"I can recommend camphor. After at least twenty-five years' experience I have found it, if properly applied, to be infallible. The box or fly-book must be well brushed out, not leaving the slightest trace of moths. The feathers and flies must also be carefully brushed with a fine brush until moths and their eggs are extinct; the camphor kept in the box or book, renewed two or three times a year, will preserve fishing flies or feathers for any time. Feathers kept for tying flies ought to be plucked from wings or bodies of birds, so that no flesh remains on the feathers. Camphor will keep moths out, but may not always turn them out."

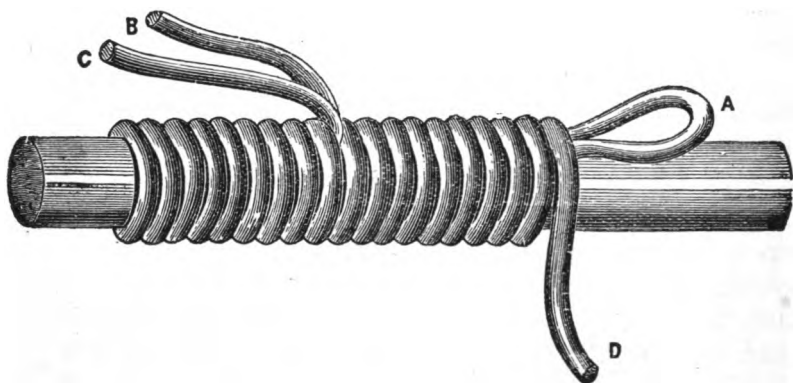
No. 6.—"Open out an ordinarily large sized square envelope for pattern, and make some envelopes of stout brown paper, the overlapping edges well glued up, and, after inserting the flies, will finally, with Prout's "Elastic Glue," carefully seal up, as with sealing wax, the whole of the borders of the overlapping flaps, he will have a number of perfectly air-tight packages which no moth will attack. The flies, before being placed in the envelopes, should be well dried on a tray or flat dish in a warm, but not too hot oven, to destroy any moths' eggs that may be among the feathers, or buried in the wool bodies of the flies. It also is a good plan to subsequently dust each fly, lightly from the head downwards, with a soft broad camel's hair brush to straighten the feathers, and dust out, should there be any, that peculiar woolly slime which moths deposit or cause. Salmon flies thus packed, if kept in a tin box in a dry place, will keep for years, as the tin box

will effectually protect the envelopes from being nibbled by rats or mice, which might otherwise for the sake of the glue thus furnish an opening for the entry of moths. I have preserved salmon flies in this manner since 1882 with perfect success. Pepper or Keating's insect powder have a tendency to tarnish silver and gold twist and tinsel, and therefore their use should be avoided. A final word of advice. Don't be persuaded to make envelopes of macintosh material. I once did, and the sulphur used in the finish of the article to prevent it stinking, spoilt all my flies with silver and gold twist and tinsel, turning in a short time these important embellishments as black as coal. I had, at this time, unfortunately, a goodly stock of "silver doctors" (a favourite fly of mine), and these were utterly spoilt, as was also a goodly number of other tinsel and twist bedecked useful flies.

Casting Nets.—A casting net is a very useful article to have with one, as sometimes it is required to get baits, such as small Masheer, for dead bait fishing, as before described. The net should be made of fine twine, or better still, silk, and need not be anything like so large as those commonly in use at home.

Tying, Splicing and Whipping.—For all whippings, etc., none but the very best English silk should be used, and care should be taken that before whipping it is thoroughly rubbed with English cobbler's wax, which is procurable at most of the tackle dealers in the country. One is often asked—"How should a whipping be finished off?" "I always find that mine come undone," or some such similar question. The method is as follows:—When only 10 or 12 more turns in the whipping remain to be taken, take a small piece of silk about 6 inches long (or whatever material you are whipping with) and lay it along the shank of the hook or whatever you are whipping. First having doubled it so that the loop end is towards the end *towards* which you are whipping, go on taking the turns as before for the remaining 10 or 12 times, but *including* this loop in the whipping.

The whipping at this stage will have the appearance as given in the following diagram. Having done this pass the



end of the silk you are whipping with, *viz.*, D, through the loop marked A in the figure and pull it taut. Then take between the finger and thumb the two ends of the small piece forming the loop, and which are marked B and C, and pull these until the end of the loop, and with which is drawn the original piece of silk with which the whipping was being carried out, is pulled in as it were *under* the last 10 or 12 turns of the whipping. The three ends which will at this point be found to protrude from the whipping are now cut off as close as possible and the whipping varnished over, or the piece A, B, C may be pulled right through and out, drawing the piece D with it. If a whipping is finished off in this manner, it will, under ordinary circumstances, last for years. It is a difficult matter to explain the above method of fastening off a whipping, without actual ocular demonstration, but it is hoped that, with the help of the above diagram, it may be clear. This system is equally applicable, no matter whether a hook is being mounted on gut or whether a ring is being whipped on to a joint. A few remarks on splicing joints may be of use. It is not at all necessary to throw away, or condemn, a broken joint, as it can always be spliced so as to apparently be as good as new, and this is more the case with reference to top

joints. I have one by me which has been broken and spliced three times. It is not always necessary to cut the ends of each piece of the broken joint perfectly smooth and even, if the break is a long and slanting one, as the inequalities of each piece will be found to fit exactly into each other. If, however, either end has been splintered, or the joint snapped off short, each piece must be cut evenly to an angle as shown in the following diagram :—



The splice should first be united with glue, and when this is dry, whipped over with well waxed silk and varnished. In some cases a couple of small rings, or ferrules of brass, may be added with advantage to a lower joint, but the metal of which they are composed must not be too thick. They will be found to greatly strengthen a splice, but for a top joint, or the one below it, they should not be used, as the least extra weight to these joints destroys the balance of the rod.

A few words on the whippings and knotting of lengths of gut together to make a cast, or trace, may likewise be found useful. In selecting lengths of gut for a trace, the greatest care should be taken that there are no flaws or weak places in the same; each piece should be tested most carefully and examined. These pieces of gut will invariably be found to be thin and weak for some inches at each end; all this should be cut off and only the thicker part used, and this should be of uniform thickness. The ends of each piece should be signed, although this is not so necessary as when preparing a single length for whipping on a hook, and the gut should be thoroughly soaked and rendered pliable before any knotting is attempted. The lengths may be knotted in two ways. Firstly, as

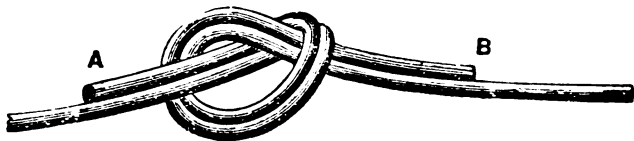


Fig 1.

shown in Fig. 1 :—In this method the ends should be cut down to about one-third of an inch long and the whole whipped over, *viz.*, from A to B. The second method of knotting is given in Fig. 2 :—Each length of gut is pulled till the knots tighten against each other ; the ends should then be cut and whipped

THE SINGLE FISHERMAN'S KNOT.

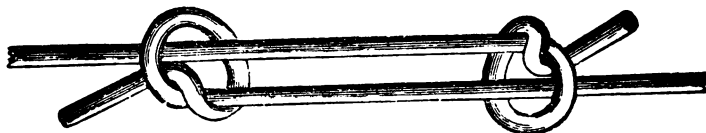
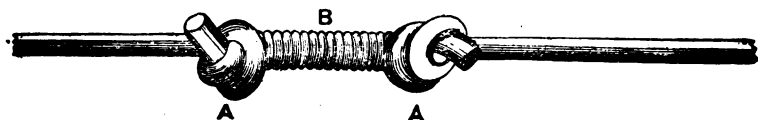


Fig. 2.

over as described above, and the whipping varnished. This knot is called the "single fisherman's knot." It is entirely a matter of option as to whether the above knots are whipped over with silk or not, and it is entirely a matter of fancy and opinion among anglers. In any case be careful that the ends of the gut are not cut off too close. The following knot for single gut traces has been given me, and is strongly recommended by a member of the Club, a well-known fisherman.

The Buffer Knot.—"Especially useful in making up single salmon gut traces. Having soaked the gut, lay the two strands side by side, and make a half hitch knot with the end of each strand. Instead of drawing these two knots together, as is done in the Single Fisherman's Knot, draw the knots A, A in the diagram, only to within about $\frac{3}{8}$ or $\frac{1}{2}$ of an inch of each other, and lap between them with light waxed silk, B in diagram, or with very fine thoroughly soaked silkworm gut. This lapping relieves the knot itself of half its duty, and acts as a sort of *buffer*



to receive and distribute the strain. Tied in the old-fashioned way on applying a steady strain, a salmon gut casting line or trace breaks almost invariably at the knot. Tied in this manner it will break at any other point in preference, no matter how great the strain may be. This knot was invented by Mr. Chol-

mondeley Pennell, and is described in his book the "Modern Practical Angler," as also in the "Badminton Library."

The above knot I have lately made a personal trial of, and can strongly recommend. The first part of this knot is the same as the one last described. With reference to the diagram showing the "Single Fisherman's Knot" which, as a rule, is all that is required, I would remark that this can be much improved by making the knot with two double, instead of two single half-hitches.

The size of the knot is not much increased, while the strength is considerably.

I believe the general opinion is against the knots on traces or casting lines being whipped over, and doubtless the trace is rendered more visible by so doing.

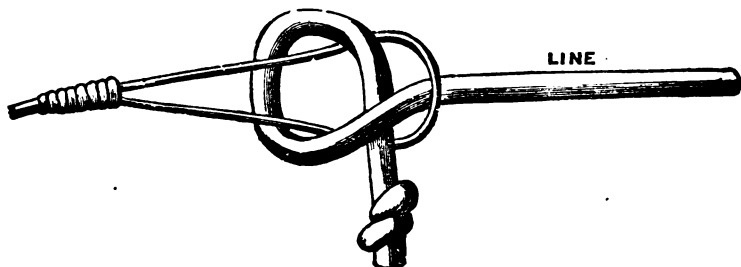
With the "Buffer knot" no more whipping is required than what is described. This knot I consider to be the best of all.

Knot for joining hook link to gut length.—



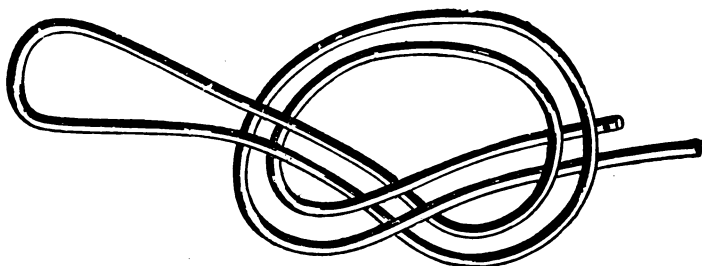
The above knot explains itself. It is the usual way of joining a hook mounted on gut to the gut line.

*Joining a gut length to the running line.—*The diagram as under explains this sufficiently well, and this is the usual

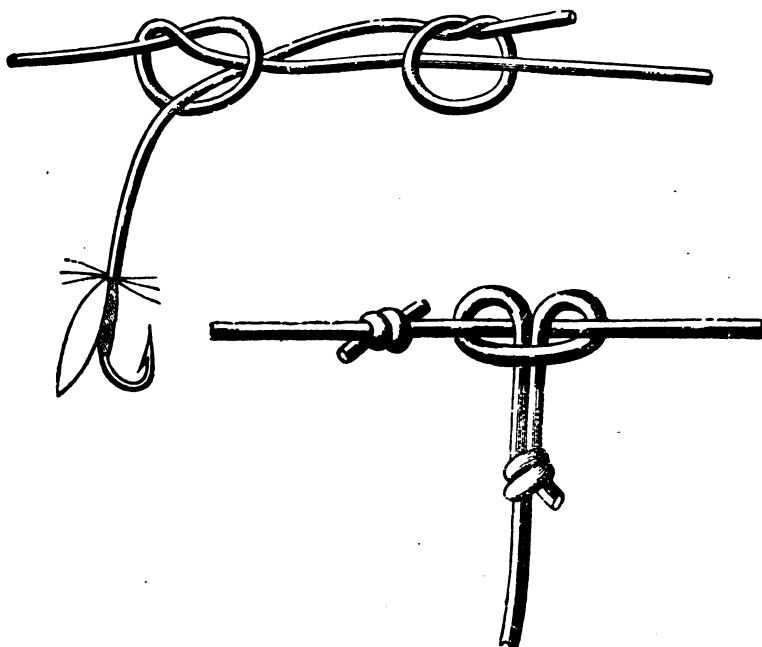


method adopted. Sometimes a buckle swivel is used, but these are considered unsafe by many, and are not often used. Personally, for light fishing, I have no great objection to these

swivels, provided a good pattern is used and strong. They are wonderfully convenient, but there is no doubt but that the knot is the safest plan.



Knotting a gut loop, or loop in a line.—This is very simple, and the diagram below will explain the usual method adopted.



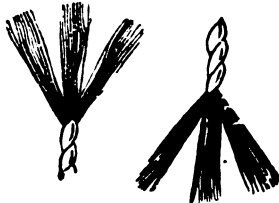
Fastening a dropper fly to gut cast.—There are several methods of doing this. Those given below are those most commonly used.

Splicing Lines.—Many people think that after a line is once broken that it is useless. This is not the case at all, and a spliced or joined line is in every way almost as good as a line in one piece that has not been broken.

The simplest way to join a line is to overlap the two pieces about 3 inches and then whip over with silk tightly, well waxing the same, and varnish over. This is a very easy method, and very strong.

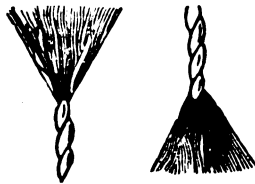
Some natives are very clever at splicing lines and unpick them for two inches or so, and then regularly plait them together.

The following method is a good way, and it is called the "Fishing Gazette Splice." It is hoped the diagrams below will make it sufficiently plain.



A

(a) Pick the ends, open carefully with a strong needle, being particular not to break any of the strands.



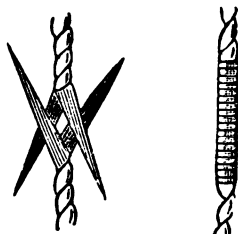
B

(b) Scrape the ends fine with a penknife on a bit of flat, hard wood.



C

(c) Make sharp forked points with the lips wet.



D



E

(d) Insert the forks in each other as far as they will go.

(e) Tie them neatly with silk.

Size repeatedly with strong Russian isinglass boiled in skimmed milk. Paint with white lead oil paint. Varnish with coachmaker's varnish.

Dead-bait, Preservation of.—It may often be required to preserve dead-baits, or to take them to a place where they are not obtainable. To do this, immerse them in methylated spirit, or in acetic acid mixed with water (proportion one third of acetic acid, two-thirds of water). As a temporary measure, pack the baits in a tin box, like sardines, with plenty of salt; they should be wiped dry first. A small slit in the belly to allow the salt to enter the body will do no harm.

Worms, to scour.—Although I have not made much mention regarding worm-fishing, it is, however, occasionally practised in muddy water and in the rains.

At home, moss is invariably used to scour worms in, but as it is not procurable in this country (at least, I am not sure, but have never seen it), some other substitute must be used. Young wheat or any other crop chopped up and mixed with fine mould may be used, or even soft grass. The worms should be given three days to scour, and a little milk should be poured into the pot, in which they are in every day.

Ferrules and Rod Joints.—These often are the cause of much trouble and annoyance to the Indian fisherman, and for this reason many prefer the "spliced" system. Ferrules often are only put on with glue which will not stand the great variations of climate, and consequently the ferrules become loose and come off, generally at a critical moment. It should be seen that each ferrule as well as its counter is rivetted on to the rod joint as well as glued. There are many kinds of patent rod joints offered to the public, but I cannot speak of them from personal experience. One kind is fitted with a screw arrangement which, I believe, is an improvement, but there is always fear of the worm or thread of the screw (inside the ferrule) becoming dirty or choked up. In time the thread of the screw would, I should imagine, be liable to wear a bit, and the result would be that on screwing home a joint, the rings of the several joints would not come in the same line with each other. There is a patent "lock fast" joint invented by Messrs. Hardy Brothers, of Alnwick, which, I believe, is all that can be desired both as regards simplicity and soundness. In rod joints of the old system with ferrules and counters there is a little catch of wire just above, as well as below each joint when put together. These should always be well bound together with a piece of twine, or piece of an old line, which will prevent the counter coming out of the ferrule. Rod joints sometimes stick so that they cannot be separated. This is generally caused by wet. The ferrule should be warmed over a candle, when with care and sufficient force the joint should easily come apart from one another. It is in a case like this that instead of the counter coming out of the ferrule, this latter comes bodily off the joint, unless it is rivetted to it as above pointed out.

Winch Fittings.—The ordinary winch fittings are very good and most generally in use. Often the plate of the reel is loose, and to remedy this a piece of cloth or leather may be sewn round it to make it the requisite thickness.

The best winch fitting of all is the "Weeger" winch fitting, of which a diagram is given on Plate VI. Any reel can be secured to the butt by this method.

A A are clutches or tapered sockets. The end of the reel plate is put into the upper socket, and the lower socket A is screwed up by the screw B until it grips the other end. C is a slide on which the moveable socket works. This method is a first rate one, and saves much trouble.

Fishing Creels, Bags or Panniers.—A regular fishing basket is a thing seldom seen in India, and yet it is very useful. One often has a lot of little odds and ends, trace boxes, etc; particularly when fishing from the bank, to say nothing of sandwiches, tiffin, etc; or a small whiskey flask. An ordinary creel can be made much stronger and serviceable by being covered with leather the same as a kilt is. The square hole in the lid is not required. For the carriage of fish a creel is not of much use. When fishing for small fish, where I expect ten or a dozen fish during the day, I always make an attendant carry a round basket, such as bunnias use to keep provisions in, or such as coolies use to carry earth in. Such a basket can be procured for two pice to two annas, and should be provided with two cross strings to carry it by. In this among wet grass I carry my fish. They can be constantly immersed in the water and kept fresh. I do not like the way of threading fish on a stick like some do. In the sun they get stiff and brittle and the tails and fins break off, and their whole appearance is completely spoilt. One of the charms of fishing is, I think, contemplating your bag, and nothing is more truly handsome than a bag of ten or a dozen Masheer, say from 2 to 6lbs., laid out in such a basket among wet grass or ferns.

A strong canvas haversack is a very-useful article, the best kind being those made of brown canvas and waterproof

lining. It is often required to hold miscellaneous articles which will not fit into the creel.

Bait-cans.—These are not much used in India as the natives usually keep baits alive in *ghurrahs* with a few holes punched in them, and which is a most excellent method, but still a good bait-can is always useful. "Field's" bait-can is the best, as by it the water is kept thoroughly aerated. It can be procured from any tackle maker at home.

Keep Nets.—These are very useful and even better than bait-cans for keeping fish alive, but they cannot be transported from place to place in one. The keep-net is a drum-shaped net on rings, which contains the fish and is tied under water. A large keep-net is very useful, as fish up to 5 or 6 lbs. can be kept in it until required for the table.

Fishing Stools.—A good folding up stool is most useful while bottom fishing. There are several patent angler's stools in use, but an ordinary folding stool out here is the best, as one almost always has a coolie or *shikari* who can carry it.

Boats for Fishing.—As has been previously mentioned, much fishing is done in India from boats, and, in fact, in many places the angler is helpless without one. At some places, such as Tangrôt, boats can be hired, and in the Doon *surnais* can be obtained which answer the purpose, but at the majority of places no boats are to be got, except, perhaps, the huge unwieldy flat-bottomed boats which are unsuited to fishing. It is a most useful thing to have a small light boat, not only for fishing but for duck shooting, and it well pays a sportsman to keep one and carry it about with him from place to place. I do not recommend leather or Berthon boats, they are very difficult to keep in good order, and are always liable to be cut by sharp snags of rock, and are expensive. Their portability is the only advantage they have. The Club boat on the Sohan cost thirty-five rupees two years ago, and will last for two or three years more. Two coolies can carry it, and the boat will take two persons easily, one rowing and one fishing. It can be carried from pool to pool, and two coolies

can carry it a day's march easily. It is made of deodar wood and well pitched outside. I had a boat made seven years ago at Jhelum of the same wood for sixty-five rupees, and it has been in hard use ever since, and is still fit for much more work. In fact, a boat can be built for so little and almost by any *mistri*, that it has always been a wonder to me that more men do not keep private boats of their own. A wooden boat should be kept half full of water when not in use. For towing purposes, when trolling, the cord or rope should be fastened to an upright in the boat so as to raise it and prevent it dragging in the water and disturbing the fish. A rudder is not much used, and an oar for steering purposes is much better.

Skinning and preservation of fish skins.—The angler may sometimes wish to keep a skin or head of a large fish as a trophy. The following directions may be of use to him. As a general rule large specimens of fish can be skinned and preserved much in the same way as birds are. To skin a fish lay it out on a board, and the incision must be made not along the belly, but along the centre of the least important side from gill to tail. The object is to remove the skin from the body with as little disturbance of the scales as possible. The skin should be manipulated from each side of the incision. When you come to the base of the fins, they must be cut, but not so as to sever them too closely. The backbone must likewise be cut and then the extremity of the tail. The scales are very fragile and easily detached, and great care in manipulation is requisite. Clean the head thoroughly, as also the interior surface of the skin, and then paint all the inside of the skin with good arsenical soap, as also inside the head, and fill up all cavities in the head with cotton wool soaked in arsenical soap. The body may be filled with cotton wool or saw-dust; fill out to full size and sew up all along the slit made. The fins and tail should be set out on pieces of wood or card, so that they may dry fully spread out. In large Mahseer it is difficult to get the skin and head to dry, and an oily substance exudes from them for months after the fish is skinned. The inside of the head when dry may be covered

with good pitch or gas tar, which accelerates the drying of the head, and protects it from the ravages of insects. The inside of the head should be scraped of flesh right down to the bone.

The gill plates of large fish, when scraped and bleached, make excellent tablets to keep on the table for pencil memoranda, etc., which can easily be washed off, and thus make a little trophy, or memento of some interesting struggle, or exceptionally good day's sport. The jaws also can be extracted and kept for the same purpose. I have on my table, as I write, a picture frame made of the jaws of six Mahseer, weighing respectively 61, 50, 45, 44, 40 and 40 lbs., total 280 lbs. and it makes a very interesting little trophy of many a good day's sport.

Angling Literature.—I have been often asked by anglers in India commencing fishing, as to what are best books on the subject to help them in their angling career.

In India this question is soon answered, as the literature on Indian fishing does not present a very varied catalogue as it does at home. First and foremost comes Thomas' splendid work, the "Rod in India," a truly valuable and delightful book. Thomas' "Tank Angling" is most useful to those who go in for fishing of this kind, and, in fact, is useful to all anglers. A useful little book called "Angling in the Lakes of Kumaon," by Deputy Surgeon-General Walker, a member of the Fishing Club, completes the Indian angling literature as yet available; at least so I believe, not having heard of any other works on the subject. The books on angling in Great Britain are most numerous, and I would recommend the following as being most generally useful to the Indian angler. The two volumes of the "Badminton Library"; Bickerdyke's "Book of the all-round Anglers"; Cholmondeley-Pennel's "Modern Practical Angler"; "Useful Hints about Fishing and Shooting," the Field Library, and "Angling" by Robert Blakey.

Day's "Fishes of India" is a most useful book of reference for an angler who is also a naturalist, but the price is high and almost prohibitive, sixty rupees per copy being usually asked.

[In Day's "Fishes of India," there is a plate of every fish des-

cribed. In the Fauna of British India, Day's two volumes on Fishes cost thirty rupees. It is a compilation from the larger work, and contains fewer illustrations. They both contain fresh and salt water fishes, and are merely descriptive catalogues.

Beavan's "Fresh-water Fishes of India" is also a catalogue, and is based on Gunther's "Catalogue of Fishes." It is out of date.

The "Handbook of the Sirmoor Fishing Club" is indispensable for the Giri river. It costs Re. 1, and is obtainable from Colonel Deane, Honorary Secretary of Club, Simla.

Every fisherman should buy Thomas' books. The "Rod in India" is a masterpiece. There is no book on fishing comparable to it, since the days of Isaac Walton.]

Every angler in India should take in the "Fishing Gazette"; its cost is ten shillings annually, and is a weekly paper. It makes two most interesting volumes, in one year, if bound up half-yearly, and is full of all the angling news at home, and contains interesting stories, Club reports and notes on every fishing matter. The overland postage is four shillings, and the paper can be obtained by writing to Messrs. Sampson, Low, Marston & Co., Proprietors, St. Dunstan's House, Fetter Lane, London, and the editor is Mr. R. B. Marston of the same address.

Dress and Camp Outfit.—With reference to a suitable dress for the angler in this country, it must be remembered that one almost always has to wade.

Waterproof long boots, wading trousers, etc., such as are used at home, are useless in India.

For leg and foot-gear, nothing beats the ordinary broadsoled English shooting boot, which should not have too many nails in it. Thick woollen socks or stockings and kneebreeches, or, if preferred, knickerbockers.

Putties can be worn, if preferred, and most men do wear them. For my own part, however, I prefer to have the leg bare below the knee, and have knee-breeches made loose and to unbutton, so as to turn up and secure *above* the knee. In a short

time, from the water and exposure to the sun, one's legs get quite hard, and no inconvenience is felt, socks being invariably worn with this dress. I am sure this plan is safer than wearing putties or long stockings; these remain wet and damp, and cling round the legs, after leaving the water; whereas one's bare legs dry in a minute almost! It is often necessary to fish, say, for half-an hour, without wading, in which time putties or stockings will have partially dried on the legs, and I think that fever, etc., is often caused by this, which would have been avoided if only boots and socks had been worn. Always wear a flannel shirt even in the hottest weather, and the thicker the better. A Norfolk jacket is the best kind of coat to wear, and no collar or anything white should be worn, as fish shy at once from anything white or flashing. The coat and breeches, or knickerbockers, should also be of a *khaki* or a neutral color, and also the hat or sola topee. What is called "*Shikar* mixture" is the best, or better still have one's clothes dyed with a mixture made of the bark of the babool tree boiled down, and which color is also best for shooting or stalking purposes. As a rule, sufficient attention is not paid to this matter, particularly by young sportsmen, and one often sees an angler in a white topee or helmet, and white flannel knickerbockers, surprised at not being able to catch fish, which at once fly off on catching sight of such a conspicuous object. I have tested this again and again, and, moreover, always have my fishing attendant or *shikari*, who lands my fish for me, whether with a landing net, or by seizing them behind the gills, clothed in *khaki* or else with nothing else but a waistcloth or *dhoti* on; as if a man in white goes near, or approaches the fish from behind to seize it, they at once struggle and plunge and often make good their escape at this final stage.

Camp Outfit and Equipage.—I do not propose to say much on this heading, as it has often been discussed by abler and more experienced pens than mine, but still a few notes may not be out of place.

Tents.—The description of tents used is, of course, a matter of opinion and money. Whatever the kind of tent, it is useful

to have a set of iron pegs and also a certain number of wooden pegs, to use according to the kind of ground. On the banks of rivers, one often has to camp among stones and rocky places, where wooden pegs would be useless, and also sometimes on sand, where iron pegs would not hold in a gale of wind.

Camp Furniture, etc.—Should be plain, strong, and serviceable, all fancy dodges, extra light camp beds, spring folding-up chairs, etc., should be avoided. They are expensive, complicated, and break with rough usage. I fully believe that in the end it is cheaper to have strong heavy articles of camp furniture. Their carriage may cost more from place to place doubtless, but they will last three times the period a light flimsy article will, which has to be constantly repaired and renewed.

To give an example, I have in my possession a heavy solid camp table made of *shishum* wood, which I have carried about for six years, and it is as good as new, whereas other tables (I have had light ones, and not made of such heavy material as *shishum*) have cracked and smashed up over and over again. The heavy *shishum* table appears unbreakable, and the comfort derived from its stability, etc., is very great when compared to the rickety contrivances one's friends in camp often have. It is a mistake to be always thinking about cutting one's baggage and camp kit down as low as possible, and to endure unnecessary discomforts. Likewise all "canteens" and fancy cooking pots, etc., should be avoided. Nothing is better in the hands of the native of the country than the ordinary *degchi* to which he has always been accustomed. Again, as before stated, have a solid wooden rod case, sufficiently long to hold the longest joints, and a good tin tackle case with partitions for everything; and everything in its place. There is nothing more distressing than to see a friend produce his stock of tackle, either from a box, or even perhaps a haversack, all tangled up and twisted into an almost inextricable mass, the gut cracked, and the whole tackle more or less useless and ruined.

The following are some useful articles :—Zinc tub, steel basin (or waterproof tub, basin and bucket), chagul, goggles, hatchet or

adze, butcher knives, steel, lantern, candles, wax matches, fusees, housewife, scissors, penknife, medicated paper, toilet soap, dhobi's soap, cotton wool, lint, bandage, vaseline, mosquito net, measuring tape, weighing machine, stationery, books, ink pellets, Kopf's soap, tins of soup, Goundry's consolidated tea and coffee, Burroughs and Welcome's tabloids of tea and coffee, compressed vegetables, carbonate of soda, cocoa and milk, curry powder, sauce, vinegar, oil, jharans, napkins, tablecloth, medicines, sago, maida, umbrella, waterproof cloak, watertight tin box.

CHAPTER IV.

NOTES ON FISHING TACKLE BY MAJOR-GENERAL C. S. LANE.

THE following notes on tackle required for Mahseer fishing have been kindly furnished by Major-General C. S. Lane:—
Flying Mounts.—I don't think this way of mounting the spoon is properly understood by many fishermen, and is therefore not so generally practised as it might be, for I constantly meet men fishing with the old "head" and "tail" hooks on their spoons. To my mind this is simply absurd. I am certain they still stick to the old fashion, either because they don't know any better, or because they are prejudiced against the "flying mount," and imagine that fish are more readily hooked in the old way than in the new, and yet it is not a new way either, for I well recollect being shown it by a very excellent fisherman, Lieutenant (now Major) C. J. Hallett twelve years ago, and I have used it ever since. I will then offer a few remarks on the "flying mount," and when I add that my views are identical with those held by Colonel T. A. Deane (who is I suppose the best "light" fisherman in India), I may at least claim for them attention, if not adoption! To begin with, the freedom of the spoon from two heavy hooks causes it to work ever so much better—it therefore spins better. In a word it really does spin instead of *wagging*! One great advantage of the "flying mount" is, that much smaller hooks can be used. This is a clear gain, as the lighter you fish in bright water, the more fish you get! If you have a light spoon and hooks at the end of your line, you naturally have the next thing to it, the trace, lighter in proportion, and, as a consequence, the swivels and split rings: these all follow suit. Then the line; that too will be chosen with due regard to its lightness. And here I may remark that a medium American waterproofed silk line beats any I know. It is

cheaper than the English lines made in the same way, and quite as good, if not, I think, far better! To proceed, we come next to the Rod. With light tackle you want a light rod. I am glad to believe that the old fashioned "bargepole," yclept a "Mahseer" rod, is now rarely, if ever, seen. The rod cannot be too light and springy to my taste. I always use one of John Enright's Castle Connell's, 16 feet, costing £1-12-6; nothing beats it! Many a break has my beauty saved me, and they kill a fish in half the time any other does. I have said above that the spoon spins better unencumbered with "head and keel ropes," (I was just going to put) no, I mean "head and tail hooks." Will you say if this is so, and surely none will deny it? There are, however, wonderful to relate, some fishermen and good ones too, though I would fain hope not many, who mistrust the "flying mount" and still stick to the old dodge, under the altogether erroneous idea that they kill more fish thus than with the "flying mount." I never fish with stationary hooks, and never will, and I certainly have never had to complain of missing fish by using the "flying mount;" indeed, I often find spoon, hooks, and all right down its mouth. If, however, you are trolling behind a boat up a long reach, as at Tanngrot for instance, where you have to use a large spoon of say three-and-a-half to four inches, then I say, put on "head" and "tail" hooks, otherwise the rate at which your spoon will spin, unfettered by any hooks, will make your line in a nice mess! Personally I don't care for that style of fishing, and in consequence I haven't been there for years, as I consider other rivers (of which possibly more anon) far preferable to the Poonch *plus* the *chukkur*.

Split-rings.—I think the objection to these quite childish! Get really good ones and they never break. I use them without fear. You *must* do so with "flying mounts," and if you get them from Walter Locke & Co., Calcutta, Luscombe at Allahabad, Eaton and Deller or Farlow, they are good enough for anything. I have only had one ring break, and that was one of Carter's at something like two pence a dozen!! Pay a good price and you may use

them as I do, fearlessly ! I constantly get fish hereabouts up to 30 or 40 lbs., and only recently one of 50 lbs., and I found Luscombe's rings all right. In short, use split-rings always unless you have to fish with the hooks mounted on the spoon, then fasten with copper or brass wire.

Swivels.—Use the very smallest compatible with strength, I never can remember numbers ; I always write in ordering both swivels and split-rings, for medium to small. Can't fish too fine ! Again I say get the best. Nothing goes so easily as a badly made swivel. Take care that they work freely—a little emery powder and a drop of oil will remove any roughness and cause them to work well. One swivel so cleaned is worth half-a-dozen dirty ones ! Use as far as possible—one on the spoon, one in the centre of the 7-foot trace, and one for the reel-line, are quite sufficient.

Leads.—An abomination ! Never use them unless absolutely necessary. They are never required unless you are fishing with natural bait, then you can't help it as you are nearly always in that case, fishing in heavy water, when if you don't put on a lead, and a heavy one too, you can't make your bait keep down. When I have to use them as above, I prefer them more or less pointed at both ends, but they should be made heavier one side than the other, as this tends to keep the bait in its proper position.

BAITS.

Spoons.—I think for general fishing nothing beats a 1½ or 2-inch spoon, and though I often put on a smaller one of 1 inch, I generally stick to my favorite 2-inch spoon. I do not believe in spoons of 4-inches and rarely use them, as I always use a "flying mount," and I find that a large spoon kinks the line dreadfully. But let it be an honest spoon, none of your "hog-backed" ones, but one with a nice broad tail end, coming to a nice point at the other end, well rounded off. Everyone has his own pet shape ; I have mine ! I prefer as a rule a silver spoon to any other colour,

though some rivers have their own particular colour. Thus in the Tawi river I used to think a brass spoon took best. However, if the fish are "on," I don't think it matters what colour your spoon is. I find a small 1-inch gold spoon very killing in the evening, but so is a good fly, "The Butcher" or "Jock Scott" for instance, or indeed any fly with jungle-cock or golden pheasant in the wings, and lots of red and yellow, and gold or silver tinsel in the body. As a rule when the big fish "go off," so do I too, and enjoy a quiet pipe and a "peg" if I can get it!

I never use leads when fishing with spoons. I have them made about double the ordinary thickness, and this enables me to dispense altogether with a lead. I find with this extra weight on the spoon itself, I can throw it as far and better, than with a lead attached to the trace, and one great advantage gained, is that there is no splash in the water, except what the spoon itself makes, which is very trifling. Another advantage is greater freedom from catching between stones, which I was constantly doing when I used a lead. I used frequently to lose a spoon and often a fish too from this cause, and I also find I can throw far better without than with the lead.

Phantoms.—As I never use leads, I have all my phantoms leaded inside, or they won't sink. I prefer the blue and silver ones from $3\frac{1}{2}$ to 6 inches in length. I find these take well as a rule. I have much larger ones, but I rarely use them, and they fill up a box.

Natural Bait.—Under certain circumstances this is the most killing of all; at the junction of rivers, and in deep pools where the stream runs in, it rarely fails. As every one has his own way of putting on a bait, it is almost useless to give any directions. A good big Limerick hook through the tail and a lip-hook is as good as any, though I often use a snood, say 10 inches long, with a small treble for the lips, and two larger ones lower down—one for the shoulder, the other for his tail. A fish must be hooked if he goes at that! At the Asun Junction last

November, I ran seven good fish one morning in $2\frac{1}{2}$ hours, the heaviest being 50 lbs. I had tried spoon and phantom without avail previously. When I put on dead-bait they went at it at once. A "Chilwa" simply hooked by both lips on a No. 7 Limerick hook takes well at all times, especially in the evening. I have had grand sport with the small ones, up to 15 lbs. in this way; or you can put a Limerick, or a small treble in above the tail, and another, a trifle smaller, through the lips. This is a capital dodge and no trouble whatever. I don't believe in a heap of baits. The few I have noticed are enough for every purpose, unless you like to go in for *atta* or livebait!

Traces.—I now come to what I consider the most important part of your tackle. In my opinion there are only two kinds of traces—the steel traces and the very best single gut, known at Farlow's as "XX" I think. These are frightfully expensive, and in common with all traces made of single gut, soon get rubbed against the stones, and untrustworthy. If I could afford a new trace every day, I should I think use nothing but these "XX" traces, but as that is out of the question, I have for years, with many others, been making experiments with wire traces in the hope of getting a trace at once, not only firm and strong, but free absolutely from "kink." I have known all along that if I could only find out how to do all this, it would indeed be a grand thing, not only for myself personally but for every fisherman; and that it would at once remove the objection so often made to the general use of wire traces, *viz.*, that they are not reliable, but often break unexpectedly to the disgust of the fisherman, who thus loses fish, bait, and all, owing to his having again put on one of those d———wire traces!

I had had a real good month on the Jumna the latter end of October and part of November, 1886. Better sport I never had, twice right down the river from Asum junction to Tajuwalla in my little boat, fishing every foot of the way, reaching places which you could only have looked at with envious eyes if wading! Some days all went well, not a hook gone—then seemingly without any reason off would go a fine fish with my

spoon and part of the wire trace, where it had broken, owing of course to an unseen "kink" I got from 80 to 100 lbs. a day on an average, but often of an evening it would be (as I was weighing the lot) "not bad, but if I had only got that 'big'un' that broke me up there, or the other fellow down there, what a bag I would have made!" Then it was—"Oh, hang those traces, what on earth makes them break? it must have been a kink, or could it have been rust?" All the time I was sure it was more than a kink that was wrong. Of course, a kink in a fine two-wire trace must be fatal; but why was there a kink when I was always so careful in throwing, and constantly looking to see if there was the slightest sign of such a thing, always putting on a new trace if I saw the least possible mark in the wire! I kept on thinking about it, in despair of getting a fine trace that could not kink, when all of a sudden it occurred to me that many years ago, I used to make gut traces of two or three hairs in quite a different way—why not make a wire trace in the same way? It might be a failure, but anyhow it was worth trying, so on getting to Dadupore at the end of my trip, I set to work. I got three pieces of the very finest steel wire, quite free from rust, about three feet each, all I could get! These I fastened separately to each of the three hooks in the "twister" which I put up, hooks downwards, on a wooden pillar of the verandah. I then got the three wires all the same length, and fastened them all to a piece of lead 9 ounces in weight, made in a pyramid shape, or rather like a cone with a brass loop on the top. I should say that before I fastened on the wires to the lead, I had placed each of them through a small disc of copper which I had made by the *mistri* there (diagram here given).



This disc was about $1\frac{1}{2}$ inches in diameter, with three holes

pierced in the shape of a triangle, thus corresponding with the hooks of the twister above, and with a short handle as per diagram. This was an idea of the moment to keep the wires separate, but also to enable me to press down on the trace, and thus prevent it from twisting too quickly. All being ready, I gave the word to begin turning the "twister." I held the lead in one hand for a few seconds till I had got a good twist on the wires, and then let go, and keeping the three wires well extended with the left-hand, I raised the disc slowly with the right, till I got to the top, when I cut off the trace from both ends. I had no sooner looked at it and felt it was all over, then I cried out "Eureka!"

I had succeeded beyond my utmost expectations. I had at last got what seemed a perfect trace, very fine, perfectly soft and even in the twist, very flexible, impossible to get into a kink, and evidently of great strength. No need of annealing a trace like that. I was delighted. I tried it and simply couldn't break it! And here I may remark that I have never seen or heard of any of my traces ever having broken, and I have given them away by dozens. I still think and say confidently, that they are perfect.

I have described them minutely, as I wish all to be able to make them and enjoy them as I do. I have only to add that these traces are made altogether in a different way to the old two-wire ones. First, there are three instead of two wires; secondly, I twist them from the bottom, instead of from the top, *i. e., towards* the "twister," instead of *from* it. The weight at the bottom ensures a perfect twist, instead of one wire being merely wrapped round the other, the third wire, of course, makes the twist closer, and strengthens the trace immensely. On one occasion I had a good test of one of my traces which I had used during the whole of my trip, and here I may say that I have used this trace for over a year, and it is as good as ever: it was originally 7 feet long, my usual length, but is now much shorter from being cut when I changed the spoon. Well, I was fishing, when unluckily I got hold of a monster turtle by the

fore foot. I held on for half-an-hour and at last pulled him out by sheer force. It took three men to lift him up the bank. He weighed over two maunds, nearly three; and provided a meal next morning for twenty-five vultures besides a few crows, so you may imagine what a size he was? Another time I got on to a "snag" at the Asun Junction and rowed out to get round it! My boat was carried down by the stream and couldn't get back in time. All my line ran out to the last inch, the strain was fearful, when, of course, there was a smash, the line, a new American silk one and very strong, parted, *but not the trace*, which, of course, I lost. I am satisfied that if they are properly made, they will never break, provided also that they are free from rust. To keep them, as also steel wire, take some *atta* and *bhuno*, i. e., slightly brown it on an iron plate over a bright fire till it is hot; a few seconds, say ten, will do it; then add a little *ghee* and mix it well into the *atta*, you should be able to pinch it into shape. It must not be damp but only soft. Put the traces into a tin box and cover them with the *atta*. They will never rust! The natives I find keep their wire in this way. "When found make a note of it!"

If my plan of making wire traces is adopted, you will not again hear of their being unreliable. The hooks, or the line may go, but the trace never! I wish to add that about three months after I had found out this new way of making them, I got a letter from a fishing friend up at Mussoorie with a couple of traces, made by Deputy Surgeon-General Collis, with a full description of the way he made them. They were made precisely as I have above described, except that he does not use the disc. I find this a great help, but the fingers must be used as well or the wires will get entangled up above, and the trace will be spoilt. My last notes on this subject were too late for the 1st edition. I hope they will be in good time for the present one, and that they may be of use to some of my brother fishermen. *Note.*—I make my traces of the *finest* wire procurable; none but this should be used, or you lose one great beauty in these traces, their fineness. I find the extra wire enables you to use much

finer wire than in the "two wire" traces; three fine wires are stronger than two coarser ones when properly twisted together, and remember, that the third wire gives extra suppleness to the trace and renders annealing (which weakens the trace) altogether unnecessary: a great advantage! *I never anneal!* The wire used is steel wire and is procurable in every bazaar in India. Always twist from *the bottom* with a weight of 9 or 10 ounces. Always take *a double turn* round the loop of the swivel, and a fish will rarely, if ever, break you!

CHAPTER V.

TANK FISHING IN THE PUNJAB, BY H. S. DUNSFORD, ESQ.,
DISTRICT SUPERINTENDENT OF POLICE, ROHTAK.

THE tank fishing usually obtainable in the Punjab may be divided under two heads, *viz.* :—predaceous and non-predaceous fish. The former include Tengras, Mulleys, and Murrel, and the latter Rohu, White Carp, and Kalabans.

We have no tank fish that will knowingly take a fly, though when Mulleys have been very much on the feed, I have known them occasionally jump at a fly as soon as it touches the water, evidently taking it for a small fish, as they have taken natural bait and spoon in the same way. There appears to be a very general belief that tank fishing is not obtainable, or very rarely so, in the Punjab. This is a great mistake! Every district in which there is canal irrigation contains some tanks which are of sufficient depth to retain water permanently, and which are, or have been some time or other fed by canal water at intervals. Every one of these, without a single exception, contains numbers of fish, unless they have been destroyed by netting, or massacred wholesale by the people with *lathis* and other weapons when long-continued drought has made the tank nearly dry. The majority of these tanks only require to be fairly and patiently tried to give excellent fishing.

The tank fishing *par excellence* of the Punjab, and, perhaps, of all India, is Labeo fishing, but as I am not at present writing a book on the subject, and as all the information the most exacting fisherman could require, is furnished in Mr. Thomas' incomparable book "Tank Angling in India," much enlargement regarding this sort of fishing is not necessary here. After many years of excellent tank fishing, I would strongly advise those who wish to obtain success in this kind of

sport to accept Mr. Thomas' teachings unreservedly and entirely. I have met many sceptics who have scoffed at his insistence upon the use of very sensitive floats, absolute exactness in the regulation of the depth of the bait, etc., etc., and their argument has been that they have done very well without these precautions. This is no doubt quite true. In my earlier experiences of tank fishing, I obtained very fair sport myself, though I was very casual in my use of floats, regulation of depth, and so on, but *experientia docet*, and looking back to those days, I feel with many a vain regret that if I had only known as much as I do now, thanks to Mr. Thomas' teachings grafted on to my more slowly gathered, and much less perfect knowledge, my sport instead of having been "very fair," would have been "Magnificent" with a capital M.

Moreover, although the rough and ready fashion is fairly successful in tanks that are not heavily fished, or that are only tried at intervals, yet anyone trying the same method, or rather want of method, in a tank which is regularly fished, would find himself quite out in the cold by the side of the individual who was careful and exact—and after all, Mr. Thomas tells us to do nothing involving any very great trouble or expenditure. Fish exactly on the bottom, use a very sensitive float, and keep a short line between the top of the rod and the float for instantaneous striking—these are his three main principles. They are simple enough and easy enough for anyone to follow! Of course, after adopting these implicitly, there will still be a certain amount of failure if you are a new hand at the game. No amount of instruction without practice will make you perfect in anything, and you cannot expect an exception in your favour in the matter of fishing.

There can be little doubt that our Rohu and White Carp, if not quite so numerous as on the Madras side, run a good deal heavier on the average. In fact, I think, I gathered as much from Mr. Thomas when we met at the Delhi Conference in March, 1888. The largest Rohu I have caught weighed 23 lbs., and I took him on a spoon,—a somewhat

unusual occurrence! I have not heard of any being taken larger than this on a rod and line, but I have seen them I should think over 30 lbs. at Okla, in the river Jumna, trying to get up the river at the sluice gates. There was no mistake as to their being Rohu, as they lay in shallow water not a foot deep for hours, and could be thoroughly well studied. In fact, I was mean enough to strokehaul one of 20 lbs. by letting a big treble hook under him and snicking him in the lower jaw, and a fine fight he made too, when he got down into the rapids below. I have taken several Rohu on paste-bait in tanks of 20 lbs. weight, and out of a great number killed in the last nine years, on paste there were far more over 8 lbs. than under.

Masonry pillars and steps are their favourite resorts, and they thrive very much better in tanks that are fairly clean than in those that are muddy. If you see Mulleys disporting themselves freely in a muddy tank, it is useless to try that tank for Labeo, but you get excellent sport, in a different way, with the Mulleys themselves. This brings me to the second sort of fish to be found in tanks, *viz.* :—

Predaceous Fish.—These are generally found in tanks with mud bottoms and banks, not necessarily deep, and especially in those which are subject to periodical sudden floodings from a nullah or river during the rainy seasons. They are far more plentiful in such tanks, than in those which are fed more frequently, but in smaller volumes of water, and by artificial channels.

The Mulleys come into these flooded tanks in enormous numbers, and of fair size from the very first. They take live-bait very freely, and also a spoon, one of $1\frac{1}{2}$ inches in length and silver on both sides for choice, but they will also very often take anything in the shape of a spoon or minnow that you like to offer them.

One of the best live-baits going is a small murrel, the *ophiocephalus gachua* of Mr. Thomas' books, and their great recommendation is their hardiness. They are next door to immortal if kept in a *ghurra* of water; indeed, I have known

them survive after being merely kept in a wet cloth for over an hour, and seem none the worse for it. They can be taken in quantities with other live-bait of sorts in a shallow corner of a tank full of Mulleys, as they take to the shallows to get out of the way of the big fish.

A good sized hook through the nose, a stout trace of single gut, and a float about 4 feet above the gut is all that is required if the fish are at all shy; if they are taking pretty freely, treble gut is the thing; it seems impervious to the formidable rows of teeth with which the Mulley's mouth is furnished, but even with single gut it is wonderful how seldom your trace gets cut. The fish is generally found hooked at the side of the mouth, with the part of the hook above the barb outside; but wherever he is hooked he nearly always keeps his mouth wide open till drawn to shore, and then is the time when he will bite through your single gut once in a way if hooked far inside the mouth. When you find the Mulleys *very* plentiful, you will usually find no other big fish. They seem to crowd out every thing else, even the spiky Tengra, which one would think could protect himself pretty well.

I sometimes put about six inches of a wire trace on my hook, with a swivel between that and the gut trace to prevent the latter getting frayed against the wire, but I have a holy horror of wire, owing to its having failed me so frequently with Mahseer, so I prefer treble gut to anything, if it is the same to the fish.

A good deal can be done with a spoon or phantom in a tank full of Mulleys. I have had some really excellent sport in this way. My first attempt was in a muddy tank under the Fattehabad bungalow in the Hissar District, where I took 125 fish, all Mulleys, in three days, with spoon and phantom. The latter became eventually so destroyed by the teeth of the fish that only the metal head and spinners remained, and I took several fish on this, and about half a dozen on a large black fly, just for the fun of the thing! They did not run very large on this occasion, and were evidently over crowded and half starved.

This was in the month of June some eight years ago. On my next visit in the following February, I took about 15 fish in three days on spoon only, but they ran much bigger, and the thinning out had evidently allowed them to grow. The average weight on the first occasion was about 2 lbs., and the biggest fish 6 lbs., while on the second occasion the average weight was over 3 lbs., and the biggest fish 10 lbs. I have no doubt that if I had remained in the Hissar District till the hot weather, I should have made a good bag of decent sized fish in this tank.

I have off and on done a good deal in this way, but the cream of this sport, as far as my own personal experience goes, was obtained on the 31st May, and 1st and 2nd June, 1888; just a fortnight before writing these notes, when I tried a couple of tanks at Kharkhoda in the Rohtak District.

On the 31st May I killed 32 Mulleys, weighing 115 lbs., of which 11, weighing 40 lbs., were taken on live-bait, and 21, weighing 75 lbs., on a $1\frac{1}{2}$ inch silver spoon. The biggest fish on this day weighed 12 lbs. After this they got to know something about the spoon, and more so as, owing to blunt hooks, several fish were severely pricked and got off. On the 1st June I killed 10 fish weighing 37 lbs., and on 2nd June, 11 fish weighing 33 $\frac{1}{2}$ lbs. Total bag for three days, 53 Mulleys weighing 185 $\frac{1}{2}$ lbs., average weight, exactly 3 $\frac{1}{2}$ lbs. If I had stuck to one tank, the total number of fish might, perhaps, have been less, but the average weight would, undoubtedly, have been much more, but as the best tank was not more than 100 yards across anywhere, I thought it advisable to take them by turn about morning and evening, and the second tank, though covering larger area, was shallower, and the fish ran much smaller.

I think 115 lbs. in one day, at this particular sort of fishing, *i.e.*, spinning in a tank, is rather an exceptional record, but it is only so because this sort of fishing is not known or practised; there were eight or nine fish in this bag of the 31st May over 7 lbs., the four biggest being 12 lbs; 11 lbs; and two of 10 lbs. each. During the three days there was also a fair sprinkling of 5-pounders, and I used a light 10-foot rod, and for a great

part of the time a single-gut trace, the sport was decidedly good !

Indifferent health in the hot weather, and consequent inability to expose myself much to the sun, have for the last few years prevented me from making the most of my opportunities, but I hope that the instances already given will serve to show that there is a very fair amount of sport in the way of tank fishing to be had by those who care to look for it.

You fortunate residents of stations in the hills, or near the foot of them, have your Mahseer fishing galore, but we poor dwellers in the plains are a good deal shut off from this, and it is mainly in the hope of encouraging fellow-anglers who are unable to pick their time for a few days' Mahseer fishing, and to show them that there is a substitute, though admittedly very inferior to the kingly sport, to be found in most of the plains districts, that I have put together these rough notes.

The Mulley is very voracious, but a very light fish for his length, an absurdly disproportionate part of him being his enormous head and mouth. With the exception of those taken at Kharkhoda, which were exceptionally vigorous and lively, I have rarely found them give much play, so that a light rod and tackle are necessary to get the greatest amount of sport possible out of them. A 10 or 12 lb. Mulley is quite as long as a Rohu of 20 lbs., perhaps longer. One of 11 lbs. which took my spoon the other day had in his maw a fish of quite half a pound in weight, a small fish just sticking out of his throat, and another unharmed and alive in his mouth, which he seemed to have stowed away in his cheek as a monkey does a nut, to be devoured at leisure. I took the last mentioned one out of his mouth, and put him on a hook, and caught another fish thereby ; I thought afterwards that this was unnecessarily rough on the poor little beast after his first escape from sudden death, but I consoled myself by thinking that if I had put him back alive, he would surely have been boned again before long.

I am told the Mulley runs up to any size, but the largest I have ever caught weighed 15 lbs., and was taken in a tank.

I saw one of the same size killed on a spoon at Dadupore two years ago. This fish is, as I suppose every one knows, the Wallago Attu or fresh-water shark of Mr. Thomas' book. The native name appears to be Mulley, Gwalli, Bawalli, Laonchi and Painsa. The last I have only heard in the Rohtak District.

The Tengra.—This is a tank fish which is frequently found in the Punjab in the same tank as the Rohu. I have not killed one, or seen one killed over 12 lbs. in a tank, but there is one which rises daily in a tank within 200 yards from my bungalow at Rohtak, quite 25 lbs. in weight I should think, which I live in hopes of feeling on my line when I have spare time, but while I have a chance of Labeo, I don't care to go for Tengras. I take a good number from 7 lbs. downwards by picketing a live-bait with a bullet as shown in "Tank Angling in India," or with a float. They are not much fun, but I am told they are good eating, and it is comforting to think that with each one killed there are so many Labeo fry saved. They do not take a spoon at all freely in tanks, though I have now and again taken them in this way. When handled, they should be smoothed down from the head backwards as they have formidable spikes in the dorsal and side fins, with serrated edges which stick into you far more easily than they are pulled out. This fish is not in Mr. Thomas' book, perhaps the reason may be that it is not found in Madras. The native names are Tingra, Tengra, and Singhara.

The Turtle.—The turtle is a beast which frequently takes paste-bait, occasionally live-bait, and more rarely a spoon.

Mr. Thomas says one species is good for soup, but I prefer "bashing" him, which is done as follows:—Take him on to a pukka road and throw him about a mile up in the air; after a few throws about a mile up in the air, and after a few flights of this kind, and falls on the pukka road to follow, his shell will, probably, be a good deal cracked. Then cut off his head and bury him and build a fair-sized house over him; when the head is off, his headless corpse should be placed in the neighbour-

hood of a nest of the largest and most ferocious ants that can be found. If you neglect these final precautions you will catch him again within a week, and so on *ad infinitum*. I have frequently taken them with just a film of shell forming over the bashed place. This reptile is called *kachua* in the vernacular; don't confound him with *kenchwa*, which is a worm, though I daresay he feels like one after a good bashing.

Below I give a few places where I have good tank fishing.

1. *Hissar*.—Tank called Devi-Bawn, the civil station side of the canal bank. Excellent Rohu fishing under peepul trees just below wall of *fakcers'* temple. The *fakcers* don't mind. Also predaceous fish in open parts of the tank of all size on spoon or live-bait; the latter for choice.

Hissar is about twelve hours' rail from Delhi, along Bombay and Rajputana line to Rewari, where there is lots of time for dinner, and change on to Rewari—Ferozepur line. Dâk bungalow with servants and all requisites.

2. *Dhana*.—Hissar to Hansi by rail fifteen miles, or from Delhi side two stations before Hissar—five miles from Hansi to Dhana along drivable road. Dâk bungalow at Hansi; private bungalow (no attendants, etc.) at Dhana. The tank here is also private property. Permission to occupy the Dhana Bungalow and to fish, should be asked from the Manager, Skinner Estate, Hansi. Splendid Rohu and White Carp in this tank; best fishing at pillars and steps on west side. Very pretty surroundings.

3. *Hansi*.—From Delhi or Hissar as above. Tank at bottom of Dâk Bungalow garden. Heaps of fish of all sorts, but they don't take very freely; fine tackle necessary, as water is very clear. Tank very pretty, occasionally too weedy for fishing at certain times of the year.

4. *Delhi*.—Tank called Shah-ji ka-talao. This used to swarm with Rohu and White Carp five years ago. I am told it has been nearly dry since then, and a lot of fish have died, but I saw a few on the move in March 1888.

Notes on Stocking Tanks, kindly contributed by H. S. THOMAS, ESQ., Madras Civil Service, by letter to BRIGADIER-GENERAL H. C. WILKINSON, C. B., late President of the Fishing Club.

About Stocking Tanks.—In Bengal you are far in advance of us and have facilities in trained men ready to your hand. The natives about you buy the fry of fish regularly every year to stock their ponds, and as there is a regular demand there has grown to be a regular supply ; and the fishermen are in the habit of catching the fry of good sorts of fish, picking them out from the common lot, carrying them alive, and selling them at so much a hundred, something very cheap !

The sort that natives most affect are the Catla and Rohi ; and you cannot do better than follow them, especially as so far you will find your way made easy for you.

(1.) The Catla is the *Catla Buchanani* of science, and the *Catla* of Bengal. Day says that it attains at least six feet in length. I have never seen it so long, but 10 lbs., 20 lbs., and 30 lbs. are not unusual weights ; and we know that it takes a bait freely enough, except in the cold weather, and is good eating.

(2.) The Rohi is *Laboe Rohita*, also well known as Ruhi, or Rohi, 5, 10 and 20 lbs. and fair weights.

(3.) The Labeo Calbasu is also as well known to you as Kala-banse, and gives the same sport as the Rohi, and attains the same size ; we have it not in South India, but we have an inferior cousin in *Cirrhina Cirrhosa* ; and it was with this and with the Labeo Calbasu or Kala-banse, that four rods in three days took 678 lbs. of fish, float fishing with a paste bait. I can assure you it was right royal sport such as you could not get in Europe, and yet they wanted the very best fishing to catch them. It was infinitely more difficult than fly, spinning, or roach fishing, and the fish ran commonly 1 lb., 1 ½ lbs., and 2 lb. each, with a good lot of 5, 6, 7 and 8 lbs. each ; and some that broke us. You could make as good or better fishing for yourselves in the two havildars' tanks (referring, it is believed, to Calcutta), if you would simply buy up as fry of two or three inches long or there-

abouts, two or three thousand each of the above four sorts, and turn them in annually, and let it be an understood thing among you that anything under 1 lb. is thrown in again, and that there is no netting.

There is no difficulty about recognising the fry of these four different sorts of fish. The fishermen, who know them by the names I have given you, pick them out of the crowds caught in their nets, as fast as you could pick out pice and rupees jumbled in a heap on the floor. These all take a paste-bait; and when large, a small live bait of 1 to 1½ inches in length or a shrimp. But a paste-bait and float is the usual thing. For those who *must* have a fish that take a fly, I would say that if you like, you may add *megalops cyprinoides*. I cannot tell you the Hindustani name for it; and the Tamil name would not help you. It is an estuary fish which thrives very well in fresh water, and runs up to a cubit in length. I have seen it in one of the ponds on the maidan at Calcutta, into which it must have got from the Hooghly. It takes a white Salmon fly, the size of a small Salmon fly, and having taken it, fights right well, springing into the air like a Trout. It sports, however, only for an hour or so before dusk.

CHAPTER VI.

NOTES AND BRIEF DESCRIPTIONS OF OTHER KINDS OF FISH, BESIDES
THE MAHSEER, COMMONLY MET WITH IN NORTHERN INDIA.

WHILE fishing for Mahseer, one sometimes takes other kinds of fish as well, and although it is not intended to go fully into the different kinds, the object of this book being to put beginners in the way of catching Mahseer, yet a few hints on the same may be of use.

The Rohu.—The scientific name for this fish is *Labeo Rohita*, the Hindustani name is Rohu or Rohi. This fish runs to a large size. I have taken them up to 18 lbs. myself, and have heard of them up to 40 lbs. They frequent the sluggish parts of streams for preference, but I have taken them almost in a rapid. If fishing purposely for them a paste-bait should be used. Ordinary *atta* is good enough, but a good paste is made of bread, mixed up with cheese, and coloured yellow or vermilion with turmeric (*huldee*). The natives also mix asafœtida with their bait, but I do not know if this is much of an improvement or not. The Rohu is an excellent eating fish, and has fewer bones in it than the Mahseer; they fight well when hooked, and although they do not go off *at first* with a rush like the Mahseer, yet *at the end*, when you think you are going to take him safely into the landing net, he will go off with a rush into the middle of the stream that is astonishing. He plays in a most persistent and dogged fashion, and keeps boring away on the line, occasionally giving sharp jerks or knocks, which vibrate right up through the rod to one's hands. Nothing stouter than single gut should be used with a small single hook or triangle. A float may be used or not as preferred, and if so nothing can possibly be better than Mr. H. S. Thomas' Detective Float, described in his Book on Tank Angling. I have seldom heard of a Rohu taking either spoon or natural bait. They bite very slowly, and if fishing

with a float in running water, it should be allowed to go right under before striking. If you are fishing in a pond or still water, strike at the slightest movement. They are the most cunning fish in existence, and the way they will suck off the bait is very annoying, and the angler must be prepared to exercise great patience to make a good bag of them. The Punjabi name of Rohu is *Koopoo*.

The Kalabanse.—This fish, which is also called the Kalabous, is the *Labeo Calbasu* of science. It grows to about 3 feet in length, if not more. Up to what weight it attains I do not know, but General Dandridge mentions fish of 15 lbs. having been taken at Torbela. This fish can be angled for much in the same way as for Rohu, and it is equally cunning. Personally I have had no experience of this fish, and cannot do better than refer my reader, who is anxious to fish for any of the *Labeos* scientifically, to Mr. Thomas' excellent works in which fishing for both the Kalabanse as also the Rohu is discussed in every detail.

The Wallago Attu, called in Hindustani *Mulle*, *Gwalli* or *Laki*, and called generally Fresh-water Shark. These fish run to an immense size. I have heard of one of over 6 feet in length, and weighing about 100 lbs. This fish is long-shaped, and the head is the broadest part. The huge mouth is a mass of teeth. He is a Siluroid, and the skin is scaleless as is the case with all the Siluridæ. They will take a live or dead-bait, and also a spoon or phantom, and I have known them taken on a bunch of entrails. Gimp or wire should be used if fishing purposely for them, as their teeth are worse than those of the Pike, and will cut through the stoutest treble gut. I have several times known a Wallago Attu of only 2 lbs. weight take a spoon of 3 or 4 inches in length. They do not give much play, and are not much from a culinary point of view.

They seem to be fish of peculiar disposition. In the autumn seasons, 1882 and 1883, a good number were taken at Tangrôt, whereas since then very few have; the biggest I have seen taken there was 10 lbs., but I have seen two or three specimens caught by natives farther down the river that could not have been less

than 50 or 60 lbs. I may mention that it has a long fin under the belly and two long feelers. The name Wallago Attu is its scientific name, but it is called by this very generally, as if it was its English or rather Hindustani name. Of the latter it has so many, even in addition to those quoted above, that it is often puzzling to make out, when in conversation with natives, what kind of fish is meant.

For those interested in this fish, a perusal of Captain Maycocks' very interesting "Account of Fishing at Narora near Allyghur" will be useful, where it is described under the name of *Gwalli*, and also many interesting particulars about this fish, and the sport it gives in tanks farther down country, are given by Mr. H. S. Dunsford in Chapter V.

The Tingra.—Belongs to the genus *Macrones*. It is found in great quantities in the Sohan; they are a fish somewhat in shape like a dogfish, with a flat head and mouth and long feelers with a large forked tail. When fishing with Chilwa (dead-baiting) they are often caught, and give very fair play. They are, however, not very good eating, and not worth fishing specially for. I have, however, known a dozen, averaging 2 lbs. each, taken out of a hole in the Sohan by one rod in an afternoon, and such sport is not to be despised. They take a spoon sometimes very freely in the Sohan when trolling from a boat.

The Kuggah.—Belongs to the genus *Rita*, which is also one of its native names. It is an abominable looking fish. It runs to about a pound or perhaps two pounds in weight. It is a thick, short fish, and each of its fins is armed with a long sharp spike. It is of a lightish green color, and on being caught it flaps about, and quacks like a duck. My readers will probably recognise it by this latter feature, if it is ever their ill-luck to catch one. Natives eat them, but they look anything but tempting. Beware of their spikes, which are very formidable, when unhooking one! Natives say the wounds caused by these spikes fester rapidly, and in fact are in a kind of way poisonous, and to see the care with which they avoid them, while unhooking them, one may place some credence in their statements.

Great numbers are caught at Jhelum opposite the city by the native fishermen.

The Butchwa.—This little fish, which I believe is also called the *Baikiri*, can be caught in great numbers in the rains and in dirty water. It will also take well in clear water, but perhaps not so voraciously as when the water is in flood or coloured. It is an extremely game little fish, and fights splendidly, rushing about with great spirit. For the table it is perhaps almost unsurpassed by any fish in Northern India. In clear water they take fly and a small spoon, and for fishing in coloured or dirty water a worm is very good, or better still a piece of clotted blood. A light rod, running line and fine gut cast with a single hook about the size required for perch fishing at home is necessary, if fishing with worm or clotted blood; and a small fly of almost any color seems to tempt them when on the feed. At Jhelum, one rod could take eighteen or twenty in an evening in June or July just above the church and not 500 yards from one's bungalow. Again, at Tangrôt in the autumn months, when the water has been too dirty for Mahseer, half-a-dozen or so can be taken off any of the boats moored along the bank, using clotted blood as a bait.

The boatmen will procure this when any animal is killed. It is a bit troublesome to put or rather keep on the hook, but a fine thread tied round it will, to a great extent, prevent it slipping or coming off. Raw meat is also a good bait.

Again, often when fishing with a small spoon in the Jungoo pool in the Poonch, I have taken good Butchwa. They run up to a pound-and-a-half, and I have heard of them of 2 lbs. When fishing with worm or blood, a small roach float is recommended, and the bait should be a little off the bottom.*

The Indian Trout.—Scientific name *Barilius Bola*; Hindustanee name, *Gulabi Matchli*, or rose-speckled fish. This little fish is called a Trout, but in reality it is not so, but it is of somewhat similar appearance owing to its spots. It inhabits small streams with stony beds, and runs from a quarter of a pound

* The Butchwa belongs to two genera, *Eutropiichthys*, *Pseudeutropius*.

in weight to one-and-a-half, or in exceptional cases to two pounds. It is found in great numbers in Central India, every little rain-fed nullah almost holding them. How far north they are to be found I do not know. I have heard of them in the Doon, but not in any of the rivers of the Northern Punjab. Jhansi was a great place for Trout fishing, and in one day I have heard of eighty fish being killed by the rod in the Barbery Nullah in a single day. The largest fish among this bag was, if I remember rightly, three quarters of a pound. They will take a fly and a small spinning bait, or tiny spoon. A small fly with white wings is, perhaps, best. On being hooked it jumps repeatedly out of the water and rushes about very furiously, fighting gamely to the last. The lightest ten-foot fly rod is recommended with extra fine gut casts. Near Jhansi very good Trout fishing is obtainable in the Pahooj Nullah and Barbery Nullah. I have also taken them in the Scinde, Parbatti, Kunu, Sark, and Morar Rivers in the Gwalior District.

The Murrel.—Scientific name, *Ophiocephalus*; Hindustani name, *Sowle*. This fish runs to three feet in length or so. He is somewhat like the English Pike in many of his habits. The best way to fish for Murrel is with a small live-bait attached to a float, which should be a good sized substantial cork-float, such as is used at home for Pike fishing. A small live-bait about four inches long is most suitable. A live frog is also an excellent bait. You should fish near the surface, about 1½ to 2 feet under. The Murrel roams about just under the weeds, very often almost on the surface and while thus occupied it is ever ready to take a bait. Gimp or wire should be used as the mouth of this fish is full of teeth. The places which Murrel mostly frequent are infested with weeds, and in some cases it is necessary to lift the fish straight out of the water, or he would get the line in such a tangle, that if large the fish would assuredly break it. The Murrel is found in tanks and rivers, preferring those that are slow running for preference. In many of the rivers of Central India, such as the Scinde, great numbers of Murrel are shot by native gunners who conceal themselves

in some tree overhanging the bank. The Murrel comes up to the top of the water, apparently to breathe, and aim is taken at his head. It is not necessary for the Murrel to be actually struck, for if the bullet goes within an inch or two of its head, the concussion is sufficient to stun it for some minutes. It immediately sinks, and the gunner or his assistant dives in and retrieves the fish. This is a very favorite amusement of the Thakoors in Gwalior, and I have seen seven large Murrel shot in one pool in less than twenty minutes. I have not often come across the Murrel when fishing in the Northern Panjab, but doubtless in tanks and rivers suitable for it, this fish is to be found. In some of the old tanks round Jubbulpur, the Murrel swarmed, particularly in an old temple tank about five miles from Cantonments, the name of which is Mahanadda, about half way to the Marble Rocks. In the tank of Burwa Sagur near Jhansi there were also great numbers. The flesh of the Murrel is firm, and it is an excellent fish for the table. It is appreciated by the natives for food, perhaps more than any other fish.

The Eel.—Hindustani name, *Bam*, is found in many slow running streams. It abounds in the River Leh, and in the rains I have seen twenty or thirty taken in this river by a native in a single day. A worm is the best bait for them, and it should rest on the bottom. They are good eating, although seldom seen at table. There is little doubt but that they do a lot of harm and destroy many small fish, as well as spawn, so that natives should be encouraged to kill them in every possible way. Night lines are effective, and just the same may be used as are for the English Eel.

[The Hindustani *Bahm* is the name of the thorny-backed Eel (*Mastacembelus Admatus*). It is more common than the true Eel (*Anguilla Bengalensis*), which the natives call *Kālān*.]

The Chilwa.—Scientific name, *Chela Argentea*; Hindustani name, *Chilwa*. This little fish is to be found everywhere. They are much used for bait for Mahseer, and for such purpose can generally be caught in a small net. They will take a small dace fly well, or a grain of rice, or any paste, or a tiny piece of a

worm. Use a very small hook, a light float, and fish with the bait about a foot below the surface. If you want to collect them round you ground-bait with small pieces of paste, rice or bran. They are very excellent eating, and if they were not so small, would give good sport in angling for them. Often in camp when out shooting have I been glad of a dish of Chilwas, and when nothing better was to be done, have often fished a match for "50 Chilwas up" with a friend. In the Sagur Tank near Gwalior City, I have known over four gross of Chilwas taken by two rods in a day with small flies.

The Goonch.—This fish I have had very little experience of personally. It runs to an enormous size, one having been taken on rod and line weighing 136 lbs. They are found, I believe, in great numbers at Okhla Weir, near Delhi, and will take a spoon, phantom, or natural bait, I am informed, almost equally well. I have no particulars to hand of this fish having been caught in any large numbers in the Northern Punjab. Its scientific name is *Bagarius Yarrellii*.

In addition to the above, there are many other descriptions of fish met with by the angler when Mahseer fishing; but these are those that, as a rule, in Northern India, are most generally met with. Lower down country and in Central India, many more varieties are taken, and tank fishing can be practised with success. The Punjab, North of Lahore, is wonderfully denude of tanks, at least those of such a kind as are found down-country, and which hold such vast quantities of fish. Mr. Thomas' book, "Tank Angling in India," is a *sine qua non* to those who have opportunities for this kind of sport. My readers will also find Mr. Dunsford's chapter on "Tank Fishing" in this book very interesting, and the notes given therein are most valuable and instructive. I may, in conclusion, state that after a lot of trials, I consider that except for Labeos, the Nottingham style of float fishing is most suitable for all Indian bottom fishing. A description of this is given in Chapter I, which the writer trusts will make the matter sufficiently clear.

PART II.

PREFACE TO PART II.

(THIRD EDITION.)

THE following notes and information regarding fishing localities have been compiled from notes and letters received by the Honorary Secretary from Members of the Club, and others.

Since the issue of the last Edition, a considerable amount of interesting and useful notes have been received, which are published in the present edition, and the old notes previously published have in many cases been amplified, and where necessary, brought up to date.

August, 1895.

PART II.

CHAPTER VII.

FISHING LOCALITIES, INFORMATION REGARDING WHICH HAS BEEN FURNISHED BY MEMBERS OF THE CLUB, OR COMPILED FROM OTHER SOURCES, TOGETHER WITH DIARIES AND GENERAL INFORMATION.

1.—Notes on Tangrôt, by G. H. LACY, ESQ.

TANGRÔT is 24 miles from Jhelum and 16 miles from Dina, the nearest railway station. The road from Jhelum as far as Shekôpur, about half way and where there is a bungalow, is drivable. From Shekôpur to Tangrôt the road is not fit for wheeled traffic. From Jhelum, of course, ponies, camels, etc., are easily procurable, and from Dina, coolies and ponies can be obtained without trouble on notice being given to the Thanadar or Station Master. The return journey from Tangrôt is done generally by boat, which takes about six hours from Tangrôt to Jhelum. The boats are of two sizes, for which the rates are Rs. 10 and 14, respectively, for the journey. The large size of boat will, however, hold a pony, if necessary, and full kit and servants. These rates are exorbitant, and the matter has often, I believe, been represented by sportsmen as well as by the Fishing Club to the district authorities, but without avail. The boatmen at Jhelum are, however, only too glad to bring a boat up to Tangrôt to take the traveller away for Rs. 7, or in slack times even less.

At Tangrôt, there is a substantial dāk bungalow, perhaps one of the best furnished and established in India, having every requirement and a good khansama. There are four suites of rooms. There is room for at least half-a-dozen camps below the bungalow on the Jhelum side having a certain amount of shade, and on the opposite side, in Kashmir territory, for three or four. Provisions are easily procurable, such as eggs, milk, butter, fowls, etc. At Mirpoor, some six miles distant, are two or three mistries who can mend reels, make rough ferrules, etc., etc. There are at present eight small boats for fishing, the rate being one rupee a day for the same, and usually about six or eight annas in addition are given to a head boatman or shikari, which is not included in the nerrick, and could well be discontinued. There are several men at Tangrôt, acquainted and able to give the angler all assistance in landing fish, etc., the best being Fukroo. Emamdin, Boota and Shera are perhaps the best boatmen. A small casting net is a useful thing to take to Tangrôt in order to get bait with.

With reference to spoons, etc., I consider for the smaller fish, and for use in the Poonch which joins the Jhelum at Tangrôt, that a silver and brass, or silver and gold spoon, from $\frac{3}{4}$ to $1\frac{1}{2}$ inches in length, to be the best, and for the larger fish a spoon of similar description from $2\frac{1}{4}$ to 4 inches in length.

For the large fish 150 to 200 yards of line is recommended, as occasionally a fish will run it all out. In 1886 I found 210 yards insufficient, it all being taken out in the first rush of a large fish, and coming to the end the trace smashed. Spinning a Chilwa, particularly in the junction, is a very deadly method of fishing, and in the spring months very large fish are sometimes taken on a live or dead bait, say of four or six ounces in weight.

For the first march up the Poonch, as far as Chowmook, there are many excellent runs and pools. Jungoo pool, only a quarter of a mile from Tangrôt, holds enormous fish, but they are very wary and seldom take a bait. Higher up at the Punchakkies, numbers of small fish may be taken with a small

spoon ; both the Arno pools (Upper and Lower) hold big fish, but of late years I think few of any size have been taken in them. At Chak, six miles from Tangrôt, is a very nice camping-ground and excellent fishing, as also in several runs between this and Chowmook. At Tangrôt, March, April, and October are the best months, and the fish take more freely in the spring than in the autumn. However, good fishing has often been obtained at Tangrôt quite up to the end of May, and in some cases even later. The Mohurir at Tangrôt, Munshi Hakim Rai, will always give information about the state of the water, etc., if communicated with by letter in vernacular, and a stamp enclosed for reply, and he can, as a rule, be trusted to give reliable information.

There is a Post Office at Dina, and a postman delivers letters twice a week at Tangrôt, generally on Tuesdays and Fridays, but the days are uncertain. Lately a great deal of damage has been done to the fish at Tangrôt by otters, which are numerous, and although a reward of five rupees per head for the destruction of the same by the Fishing Club has been offered, yet up to the present none have been killed. I shot one myself some years ago, but since then have not again succeeded in doing so.

It is hoped that the orders recently issued by the Kashmir Darbar regarding the preservation of Jungoo Pool and the lower reaches of the Poonch will be strictly enforced, and if so, it should have a beneficial result.

One march up the Jhelum is a place called Kasi, where large fish have been taken, and is perhaps worth a visit if Tangrôt is much crowded. For notes on the Poonch River see notes in other parts of this chapter.

The following is a diary of a fishing trip to Tangrôt in October, 1886, which may give an idea of the sport obtainable there. The letters, in the second column, show the places where the fish were caught, as shown on the Tangrôt map published herewith, taken from the map in the Tangrôt

"Angler's book," and which was executed by Captain W. T. Fairbrother :—

Date.	Place.	Times	Weight.	How caught.	REMARKS.
13-9-86	L.	A. M.	8 lbs.	On Chilwa	
Do.	L.	A. M.	1 "		
14-9-86	H.	A. M.	1½ lbs.		
15-9-86	G.	A. M.	5½ "		
16-9-86	L.	P. M.	2½ "		
Do	L.	P. M.	1½ "		
17-9-86	L.	A. M.	7, 5, 3¾, 3, 2 lbs. 2 and 1 lbs.	All on ¾ inch gold spoon.	Water getting clear; on 16th lost a heavy fish at L. on live-bait, not suffi- ciently hooked.
18-9-86	L.	A. M.	4¼, 4, 3, 2¼, and 1½ lbs.		
19-9-86	Chak	A. M.	2½ & 1 lb.		
Do.	Do	P. M.	4 & 1¾ lbs		
20-9-86	Chak	A. M.	3½ & 1½ lbs.		
21-9-86	Between A and E	A. M.	10, 5¼, 4, 4 lbs.	All on ¾ inch gold spoon.	Water very clear. Total weight on 21st, 38¾ lbs.
		P. M.	3¼, 3½, 2, 2, 1¾, 1½, 1, 1 & ½ lb.		
22-9-86	K.	A. M.	2 lbs.		
Do.	H.	A. M.	2½ lbs.		
23-9-86	E	P. M.	3¼, 2¼, 1¾, 1½, 1, 1 & 1 lb	All on one inch brass and silver spoon.	On September 25th, I hook- ed a heavy fish at M. in the Jhelum at about 5 P.M. He took out 160 yards of line straight off the reel, when the line (210 yards) came to an end before I could get on shore, and the wire trace smashed. I saw this fish as he jumped out of the water and imagined him to have been at least 80 lbs., if not larger!
24-9-86	E.	P. M.	2¼, 1½, ½ & ½ lb		
25-9-86	K.	A. M.	9, 8¼, 6, 5½, 5 & 3 lbs.		
26-9-86	N.	A. M.	44 lbs.	4 inch silver and brass spoon.	A female fish, length 4' 2"; girth 2' 2", killed in one hour. Windy and dusty.
Do.	L.	A. M.	10, 5, 4 & & P. M.		
			2½ lbs.		
27-9-86	K.	A. M.	8 lbs.	On 1 inch silver and brass spoon.	
Do.	L.	A. M.	5¾, 1½ & ¾ lbs.		
28-9-86	L.	A. M.	5½ lbs.		From September 29th to October 4th, both Jhelum and Poonch were dirty, and fishing impracticable.

Date.	Place.	Time.	Weight.	How caught.	REMARKS.
5-10-86	N.	A. M.	50 lbs.	On 4 inch silver and brass spoon.	A female fish, length 4'-3", girth 2'-3" killed in three quarters of an hour.
6-10-86	N.	A. M.	Lost a heavy fish by line fouling.
7-10-86 to 13-10-86.	A very heavy flood came down, the Poonch rising 10 or 12 feet. Fishing with spoon useless. Several anglers had to go away disappointed.
14-10-86	Sheko- pur.	P. M.	18, 18, 16, 11 & 3 lbs.	On "atta" colored red.	Water at Shekopur too dirty for spoon. Four of these fish were Rohu, which gave very fair play, the tackle being fine. The Rohu is very good eating, and appears to be a ravenous fish, as I lost several slightly hooked.
	Tangrôt				
16-10-86 Do.	K. K.	A. M. P. M.	5 & 4 lbs. 2 & 1 ,,	{ On 3/4 inch gold spoon	
17-10-86 Do.	L. L.	A. M. P. M.	6 & 5 lbs. 2 & 2 ,,	{ On 1 inch silver and brass spoon.	
18-10-86 Do.	M. M.	A. M. P. M.	13 lbs. 12 ,,	{ On 3 1/2 inch silver and brass spoon.	
Do. Do. 19-10-86	L. M. M.	A. M. P. M. A. M.	8 & 7 lbs. 6 lbs. 13 ,,	{ On 1 inch silver and brass spoon.	Also lost a fish which must have been a heavy one, by tringle being crunched up.
21-10-86 Do.	M. M.	A. M. A. M.	10 lbs. 61 ,,		

This last fish, the biggest on record in the Tangrôt Anglers book up to the present, was booked about 9-30 A. M. at 'M.' He rushed all my line out, 140 yards, just as I landed from my boat and was pulling dead on the knot. I ran on, but fell in the mud, when my boatman Rokundin, to whom great praise is due, seized up the rod, and rushed into the water, the fish now making straight across the river for the 'big rapid' marked 'O.' Most fortunately Deputy Surgeon-General Collis' boat

was following mine, and getting into it we followed the fish down the rapid, otherwise he must have inevitably been lost, and most probably all the line and trace. We went down the rapid at a frightful rate, and at one time must, I believe, have passed the fish, the 140 yards of line being loose in the river, but providentially it caught in no rocks, and I found the fish on when we landed below. Two or three times he had taken all the line out, and was pulling dead on the knot, but by a miracle nothing broke. The fish took to sulking, and for fully $3\frac{1}{2}$ or 4 hours I hung on to him, but could not move him. At last at about 2 P. M., he gave in, and I landed him at 'P'—a female fish 4' 7" in length and 2' 6" in girth, weight 61 lbs. Caught on a $3\frac{1}{4}$ " silver and brass spoon and treble gut trace.

As I believe there is no precedent at Tangrôt of any fish, and certainly none so large rushing across and down the 'big rapid,' and being followed and finally landed below, I have taken the trouble to enter an account of this at considerable length. The fish was hooked right under the gills, which accounted for his extraordinary vigour and rushes. In conclusion, I may state that I am greatly indebted to Deputy Surgeon-General Collis in giving up his morning fishing and following my fish in his boat with me down the rapid, an act not unattended with a certain amount of risk.

This gentleman can vouch for the correctness of the above details and weights and measurements.

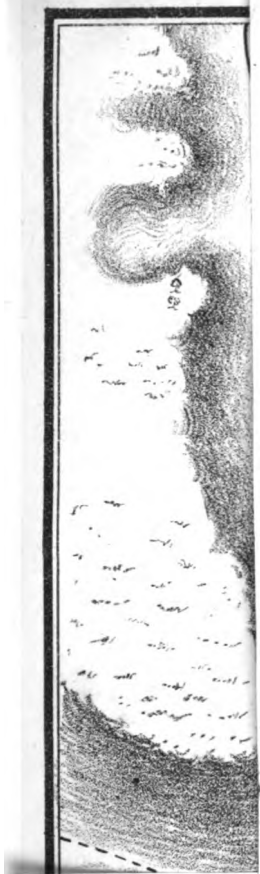
"I can fully verify the above, as I was present at the time, and the facts stated by Lieutenant Lacy are perfectly correct."

(Sd.) W. COLLIS, *Deputy Surgeon-General*.

On the 23rd of October I got a $19\frac{1}{4}$ lbs. fish at N, when I was obliged to come away. My total bag being as under, *viz.*, $551\frac{1}{2}$ lbs.

The number of days on which I actually fished was 28, making an average of $19\frac{2}{3}$ lbs. per diem. The number of days on which the river was unfishable on account of flood during my stay was 13.

A Map of Tangrôt is herewith given.



2. *Fishing at Tangrôt in the Cold Season.*

To show anglers that occasionally good sport may be got at Tangrôt in the winter months, the following diary by a well-known fisherman is given.

6th January.—Marched in from Palak and went out on river at 2 P.M. Poonch River very low but good color after late "spate." Tried junction and M. (Tangrôt angler's map) but did not get an offer; then went up to Jungoo and caught the first fish of the season, a nice fish of 14 lbs., and another of 4 lbs. Decided to halt to-morrow.

7th January.—Tried the junction but nothing stirring. Fished Jungoo from 2 to 6-30 P.M., a bright warm day, caught 11 Masheer of 17, 7, 6, 6, 5½, 4, 4, 3, 2½, 2, 2 lbs.; also two Kalabanse of 2 and 1½ lbs., both of the latter where hooked foul.

8th January.—Cold morning but sky overcast, but cleared up fairly bright. Fished Jungoo from noon to 5 P.M. Results—4 Masheer, 33, 26, 5, and 3 lbs., and two Kalabanse of 2 lbs. each, both hooked foul. All these fish were caught on a 2½ inch Eaton and Deller's spoon, silver and gilt with fine wire trace.

All the Masheer except three were hooked in the mouth, the other three had no doubt also come at the spoons. I also slightly hooked another fish, which threw himself out of the water, and must have been about 30 lbs. They were all very clean and in good condition, and ran hard, but in sluggish Jungoo the sport is not to be compared to killing a fish in the heavy water at the junction."

Total bag—148 lbs. in 3 days.

3.—*Notes on a Fishing Trip on the Rivers Poonch and Mahl, by* G. H. LACY, ESQ.

"I left Rawulpindi on April 14th, 1888, my proposed trip being to fish Tangrôt till May 1st, then to march up the Poonch as far as the town of Poonch, where the Rajah had kindly promised to put me up, etc. From there to cross the lower portion of the Haji Pir and hit off the upper reaches of the Mahl, to fish down the Mahl to its junction with the Jhelum at

Dhalcote, and then return to Rawulpindi, *viz*, Murree. On arriving at Tangrôt on the morning of April 15th, I found the Jhelum very dirty and the Poonch only just clearing. The mouth of the Poonch was much winded out, and owing to the dirty water in the Jhelum, it was impossible to fish the "chuckur." I do not intend to give full details of any sport at Tangrôt, as I have already given an example of Tangrôt fishing in this chapter, but between April 16th and April 30th I made a bag of 48 fish, weighing 290½ lbs. During this time the weather was most unfavorable, continual storms, both of dust and rain, and thunder prevailed, and on several days the Poonch was so dirty that spoon-fishing in it was impossible, and I was obliged to fish with natural bait and "atta." Most of the above fish were taken on either a 1½-inch or 3½-inch silver and brass spoon, and the remainder fishing with "atta," which of course diminished the sport, but at the time and under the circumstances it was the only way to catch fish.

Although I have found previously that in the spring months the fish took a chilwa or dead-bait, freely, they did not do so this year, and which I could not in any way account for. I left Tangrôt on my journey up the Poonch on May 1st; owing to a heavy storm on April 30th, the Poonch rose 5 feet and came down dirty, so I gave up all idea of getting any fishing this side of Kotli, the 4th march up, and accordingly marched by the regular route, and not along the track of the river. I was moreover anxious not to lose too much time over the Poonch, and wished to get to its higher reaches and the Mahl River without much delay. The first march up the Poonch is Chowmook, distant from Tangrôt 10 miles; the path runs for the first 5 miles through low hills and then crosses the Siakh plain. You pass Chak at 6 miles, which is a good place for fishing. I may here mention that on the Siakh plain are two or three small nullahs of still water with grassy banks, which hold fish up to 2 or 3 lbs. These could doubtless be caught by bottom fishing. If the angler was encamped at Chak and the Poonch was dirty, they might afford some sport which would be better than nothing.

The regular route now leaves the river a bit, and the 2nd march is Biari, distant 9 miles. An easy march, first 4 miles through the fields and remainder through low hills. There is a nice camping ground at Biari. The 3rd march is to Sensar, 14 miles. The road in this march diverges still farther from the river. The first 4 miles are through low hills and nullahs, and then it crosses a range of hills about 3,600 feet high. The so-called road is a mere track, or dry bed of some mountain torrent. This range of hills is covered with pines, and the scenery is rugged and picturesque in the extreme. A nice shady camping ground at Sensar, close to village. 4th march to Kotli. In this march you again hit off the river. The distance is about 15 miles, and it is a long and tiring march. The path runs across another pine-covered range of mountains about 3,700 feet above the sea level, and the path is extremely bad and often a mass of boulders, or a place where you have to use your hands to keep your footing. The path crosses the Rhunghur at about 9 miles, and hits off the Poonch at the ferry about one mile below Kotli. This is a considerable village and, like most of the Jummo towns or villages, very filthy. You camp below the village in a garden, but it is not a pleasant camping ground, and somewhat dirty. Fished in the evening in the rapid and reach below Kotli, where the river is very good for fishing. Got fish of 14, 10, 7, 4 and 3 lbs. on a $1\frac{1}{2}$ -inch silver and brass spoon. I did not stop to fish the junction of the Rhunghur at Hil as this stream was dirty. As the route to Poonch was in two long marches, *viz.*, first to Saira 15 miles, and then Poonch 14, I determined to do it in three marches, and this would give me time to fish the Poonch in the evenings. On the 5th marched to Leri, 9 miles. Camped among some trees high up on the river bank. Fished in the afternoon and got fish of 10, 10, 7, 4, 3; 2, 1, 1, 1 and 1 lbs., mostly in rapid just below camp, others higher up. The road improves a great deal near here, and has evidently been repaired lately. On the 6th, marched to the junction of the Mendola with the Poonch, 7 miles. Road much better, and

T

ascents easy. Pretty camping ground close to river about 300 yards up the Mendola. I would here mention that the river of this name in the map is called Mendli and not Mendola. In fact all up this route I found villages given names in the ordnance map that no native had ever heard of. The Rhunghur is called Rungoo, and the river called the Swan in the map which joins the Poonch about 8 miles above Saira is called the Rhunghur by the villagers. As the Mendola junction seemed a likely place for fish, I intended to stay two or three days here and fish. In the evening I got two fish of 7 and 4 lbs. The water is so heavy, and the rapids so large that playing a fish is a matter of great difficulty. There are, however, some good runs in the Poonch, and some fine pools for fly fishing in the Mendola. The scenery here is lovely, and the place is well worth stopping at. A shikari named Hyat Ali, lives at Saira, a mile off, and is recommended as knowing all the various places for fish, and making himself generally useful. On May 7th, got fish of 5, 4, 4, 4, 3½ and 3 lbs. and lost two others, one a large one. I fished here for four days more till the 10th, but the snow-water came down too heavily to do much good, getting only a few small ones, biggest 5 lbs. I tried the Swan river (or what is called the Rhunghur by the natives), but there was not sufficient water in it to do any good. Arrived at Poonch on May 11th. Before proceeding farther I will recapitulate the various camping places on the route from Tangrôt to Poonch, and give some additional notes on the same. As previously stated the regular route or road, although it is somewhat incongruous to call it a road, being in most places a stony path, or bed of a nullah, is as follows :—

Tangrôt

<i>Chowmook</i>	1st march,	10 miles.
<i>Biari</i>	2nd "	9 "
<i>Sensar</i>	3rd "	14 "
<i>Kelli</i>	4th "	15 "
<i>Saira</i>	5th "	15 "
<i>Poonch</i>	6th "	14 "

Total ... 77 miles.

I believe these distances exceed those generally given, but they are not a bit less than they actually are, the road winds in and out of the hills considerably. As before mentioned, if preferred the journey from Kotli to Poonch can be split into three marches, *viz.*, Kotli to Leri 9 miles, then to Mendli 7 miles,—this is the junction of the Mendola with the Poonch, one mile beyond Saira—and then to Poonch 13 miles.

The other route by the river, which would be taken by anyone fishing the river steadily up, is as follows:—

<i>Tangrôt</i>						
<i>Chak</i>	6 miles
<i>Palak</i>	8 "
<i>Kirmal</i>	5 "
<i>Nar</i>	6 "
<i>Chak</i>	8 "
<i>Thatl</i>	5 "
<i>Kotli</i>	6 "
<i>Leri</i>	9 "
<i>Mendli</i>	7 "
<i>Madarapur</i>	6 "
<i>Poonch</i>	7 "

Total ... 73 miles.

The above route is a good one for fishing up the river for anyone with plenty of time at his disposal. Boats can be taken from Tangrôt as far as Kotli, and for further particulars I refer my reader to Captain Lumsden's account of his fishing in the Poonch in this chapter. Of course one can halt anywhere almost, according to fancy, but the above are the most convenient. I omitted Chomook, the first march from Tangrôt; the angler can also halt there if he likes but it is perhaps best to move on to Palak and fish there and at Potah.

General Observations on the Tangrôt and Poonch Route.

I consider the Poonch route quite unfit for ladies to attempt (*vide* also Captain Lumsden's remarks), although several have done it. The road is so bad, and in many places so steep that a dandy could scarcely be carried in certain spots. I would not recommend either that valuable ponies be taken. Their feet get

fearfully knocked about. A mule, or hill pony could be ridden most of the way, but the rider would have to dismount in many places. The coolies are good, and as a rule easily obtainable, also supplies, except at some of the smaller villages on the river, mentioned in the second route given. The native officials are everywhere civil and obliging. The heat is not anything like so bad as on the plains. In May the nights are quite cold. The route varies from 1,200 (at Tangrôt) to 3,300 feet above the sea-level. There is a certain amount of game to be had if marching in the shooting season, chikor, black and grey partridges, pigeon, quail, etc, etc. I also saw pig and kakur, and there are bears in the higher hills near Poonch. In May the river is much affected by snow water and fishing uncertain. In the tributaries of the Poonch, it may be said, there is not much fishing, at all events in May, except at the junctions and in a few pools; they are all so low, and nearly dried up. The fishing in the Poonch is perhaps more uncertain than in any river in India. If the water is in good order, and the fish on the feed, I consider there is none to equal it, but when the fish are not feeding, the fishing is almost *nil*. It has been the custom of late years to run down the fishing in the Poonch (I do not mean actually at or near Tangrôt), but I can assure my readers that the above is greatly the cause, *viz.*, the uncertainty of the fish being on the feed perhaps more than in any other river. The very best time for the Poonch is from about September 15th to October 1st; all the good bags of late years have been made between, or about these dates. Year after year a heavy fall of rain takes place about the last week in September, or first week in October. Just *before* this is *the time*. Every year it is the same. In 1883 Colonel Martin took over 150 fish during the last week in September; in 1885, General Sir M. Biddulph and party took 139 fish during the early part of October, and in 1886 Captain Lumsden's bag made the last week in September speaks for itself. I could quote many other good bags all taken about this time. In 1886, 1887 and 1889 I swa successful myself at this time, *i.e.*, two or three days

before the flood came down which, as I said before, invariably happens about the end of September. After this flood, although the water cleared again, I could scarcely do anything, except in 1889. As to the spring or hot weather fishing it is very uncertain on account of the snows, but on the whole it is worth trying and on some days, when from some cause or other there is not much snow water in the river, the fish take very fairly well. Unless it is intended to take in the Mahl fishing as well, I would scarcely recommend a trip to the higher reaches of the Poonch in the month of May, for the purpose of solely fishing this river, on account of the great uncertainty of the melting snows. March and April are the best spring months.

Postal Arrangements.—There is a post-office at Dina, and letters are delivered twice a week at Tangrôt, and then must be sent up the Poonch by coolie or private arrangement. At Poonch there is a post-office and letters are delivered daily. They go as far as Kahuta in Rawalpindi District, (from Rawalpindi) by Government post; from Kahuta to Poonch the Raja of Poonch has a postal service of dâk runners. Postage is charged by the Poonch Post-office for all letters entering that State, *i.e.*, coming from Kahuta to Poonch, and stamps are obtainable for letters to be posted.

I left Poonch on May 21st, having been most hospitably entertained by His Highness the Maharajah, after a pleasant stay, during which time I had some excellent shooting. The route from Poonch to the Mahl is as follows :—The first march is Kharidraman, 14 miles from Poonch. This is a long and hard march, as you go up a very steep ascent the last two miles. From Kharidraman the next march crosses a range of mountains called the Taoli Pir; these form the water-shed between the Poonch and the Mahl, and the place where the road crosses is close on 9,000 feet above the sea-level. The scenery is very picturesque, the hills being covered with dense pine forests, so thick as in many places to quite shut out the sun. The jungle is very dense, and in many places the hills are covered with masses of wild rose trees and other

flowers. The path on the southern, or Kharidraman side of the Taoli Pir is very bad, but on the northern side, is very good for a hill path, and has lately been repaired. Tuli is the second halting-place from Poonch and from Kharidraman to Tuli is about 9 or 10 miles. Tuli is a small village on the right bank of the Mahl, but as the Mahl here is a mere trickle, it is no use stopping at Tuli, but go on to Bagh, 10 miles lower down the river on the right bank. Road fair. Between Tuli and Bagh there are no pools and the river was almost dried up. The river bed is, however, very wide here, and a good deal of rice is cultivated along the banks. This then is the route from Poonch to Bagh, three marches, and the Mahl first becomes fishable just below Bagh.

I will recapitulate them—

	<i>Poonch</i>				
1st march	...	<i>Kharidraman</i>	14 miles.
2nd march	...	<i>Tuli</i>	9 "
3rd march	...	<i>Bagh</i>	10 "
—					
		Total	33 miles.
—					

This route, however, I do not recommend. It is difficult to get coolies and supplies at the first and second stages, and the road is not particularly good for the first stage and-a-half. If time permitted it would be better to do the first march in two short marches, halting at Gopalpur (or Tat) which is half-way, and where supplies, etc., are obtainable. The best route to go by from Poonch to the Mahl is—

1st march— <i>Jhira</i> , or <i>Kajira</i> (marked Katera on the map...	14 miles.
2nd march— <i>Parl</i> ,	14 miles.

From Parl the road hits off the Mahl near *Raoli*: this is a good fishing centre to halt at although the camping ground is not much. In any case it is not necessary to go to Bagh, as the river can be fished up to Bagh from Raoli, and there is no fishing above Bagh. If the angler, however, is pressed for

time he can push on to Mangh, 3 or 4 miles below Raoli, where there is good fishing. Raoli, the 3rd march, is 14 miles from Parl.

For this route it is not necessary for anyone fishing up the Poonch river to go on to the town of Poonch; he can make one march from Saira, or the junction of the Mendola (Mendli) to Jhira, about 14 miles, and this saves a march to anyone who is hard pressed for time. This route is described by Mr. L. C. Fryer further on in this chapter. It is about 13 or 14 miles from Parl to Raoli, and, as a rule, there should be no difficulty in obtaining coolies or supplies. Looking at the ordnance map this route looks rather formidable, as it would appear that you have to cross three big ranges of hills, but I am informed that such is not the case, and that this is very misleading. Parl is a Tehsil of Poonch and a considerable village.

So much for the routes from the Poonch to the Mahl river. I arrived at Bagh by the first route described on May 23rd. There is a nice camping ground in an orchard here. Bagh is a large village and Tehsil, and the Tehsildar here is most obliging and courteous. As I before stated the river is not fishable above Bagh; in fact it only rises 6 or 7 miles east of Tuli, the march above Bagh, in the Haji Pir range. On the evening of the 23rd, I took 9 fish, weighing 14 lbs., in three pools about two miles below Bagh, and on May 24th 13 fish, weighing 22lbs., in these pools and lower down towards Raoli. All on a small gold spoon, about three quarters of an inch long. I had bad luck and lost a lot slightly hooked. At Bagh I met three members of the Fishing Club, who had fished the Mahl all the way up and were going into Kashmir, by the route, *via* Uri, three marches from Bagh (for detailed route *vide* W. R. Little's notes on the Mahl). One of them had met with scarcely any sport at all, and none done well. One rod had taken 72 fish weighing 161 lbs., biggest 25 lbs., in 19 days' fishing. Raoli is 5 miles below Bagh, and some encamp here, but it is not necessary. Go from Bagh to Mangh 8 miles. You can fish all the river to Raoli in one day from Bagh, and also up to Raoli from

Mangh. Raoli is a very small village, and there are only one or two small trees and no shade for one's camp. Mangh is 8 miles from Bagh on the right bank. Here there is an excellent camping ground, and there are deeper pools and larger fish. I arrived at Mangh on May 25th. In the evening I got six fish, weighing 18 lbs., on small gold spoon. I stayed at Mangh three days and got 16 fish weighing 79 lbs., biggest 15 lbs. I found they would not look at a frog so high up the river and the water was as clear as glass. I caught a few fish on *machai*, or the seed of the maize plant, which is here everywhere cultivated; this I used after the manner described for the *gram* fishing at Jubbulpur, with two or three grains threadled on a hook. I used a fine trout gut cast, and a roach hook. They would not look at it on thicker tackle than this! Several broke me, but I got a 7-pounder on this light tackle, after nearly half an hour's play. Four of the above fish were taken on small gold spoon. The best pools at Mangh are one just above the camping ground, one about 500 yards farther up, and two pools about half a mile below. On May 29th I moved down to Thundi-Dhun or Danditana as the maps have it, about 8 miles lower down. The road here crosses the Mahl about one mile below Mangh and runs down the left bank of the river. In all these short marches, it is, however, best to fish down or up the river, as the case may be, and one's baggage will arrive at the camping ground before you do, and your camp be ready. I did not halt at Arja; this is not necessary as you can fish the whole river both ways from Mangh and Thundi-Dhun. At Thundi-Dhun there are some splendid pools: the best is about 300 yards above the camp. This is full of big fish up to 40 lbs. or so. I got 8 fish at Thundi-Dhun weighing 68½ lbs., biggest 24 lbs.; 5 on frog and 3 on *machai*. I had most extraordinarily bad luck here, on one day losing six fish, one by breakage and five insufficiently hooked, none less than 10 lbs., and two of them might have been of any size, certainly 30 lbs.! Below here are some fine pools and full of fish. At Thundi-Dhun there is a nice strip of grass close to the river to camp

on, but only a little shade from one or two trees. This is, in my opinion, certainly the best place for fishing on the Mahl. On June 3rd I moved down to Dhalcote, or Tain, as the name of the nearest village is called. There is no village called Dhalcote, but the little fort about a mile from the junction is called Dhalcote. Here I stayed till June 11th, when I moved to Murree on my way back to Rawulpindi. I may here mention that the road between Thundi-Dhun and Dhalcote is very bad, and it is much best to march down the bed of the river. My bag at Dhalcote was 11 fish, weighing $94\frac{1}{2}$ lbs., best fish 19, $16\frac{1}{2}$, 15, and 12 lbs., all taken on frog. This made my total bag on the Mahl 57 fish, weighing 278 lbs., fishing 14 days. I was much assisted by two storms of rain which kept the fish on the feed, and colored the water. If the water had remained clear I could not possibly have had such good sport. I found the river full of fish, and noticed a great increase in the number of big ones, *i.e.*, from 10 to 20 lbs. Frog is the bait of all others. Use the white-bellied ones, and ground-bait your pools to be fished with half-a-dozen frogs or so overnight, and just before fishing throw in one or two. The effect is wonderful! When this river is clear, I much fear that it will not stand much fishing. The fish are then very shy, and I found it impossible to catch them. It was the first cast or nothing! The fish too have a provoking habit of "taking short," *i.e.*, not taking the spoon or bait properly, and only running off a yard or two with it; this is very annoying! Just *after* a flood when the water is clearing is *the* time for fishing with frog; the fish then run at it furiously. I did not try a spoon below Mangh, but fished only for big ones with frog. For small Mahseer up to 3 lbs. or so, I think above Raoli as far as Bagh is the best place (*vide* also W. R. Little's remarks in his notes on the Mahl), but even there I found the fish extremely shy, and they would not rise after the water had been once fished over. I did not try fly, although the fish in this river will sometimes rise to it. I must caution my readers that the Mahl is a most dangerous river,

and rises enormously, after even a comparatively little rain. I was fishing at the Crag Pool when all of a sudden the river rose 2 feet owing to rain in the hills. I had to run for it almost, and was nearly cut off from my camp on the opposite side of the river. However, in an hour the water ran off, and I was able to cross. When the river is at its normal level you can wade across almost anywhere. All the fishing is done by wading. I believe if the river rose very much the camping ground at Dhalcote might be submerged, as it is in the rains annually, but for this the river would have to rise enormously. The villagers say that two or three days' rain is sufficient to cause this. In the hot weather, however, I do not think there is much fear of this. The heat in the Mahl valley I found not excessive or anything like so bad as in the plains, even in June, and in September, from all accounts, the temperature and climate is perfect. Pir Bux the shikari, who usually accompanies anglers, relates a story of a Sahib who lately hooked a fish in the Crag Pool at 8 A.M. which broke him at 6 P.M., after 10 hours play! Whether this is true or not I cannot say, but there must be some truth in it. No account of it was left in his book in which anglers generally make entries of their sport, and it would be interesting to have some particulars about it. There are some very large fish in the Crag Pool, certainly 50 lbs. or more! It is an odd thing, although there are quantities of big fish about the junction, they will not take any bait; and such has been the experience of all who have fished the Mahl this year. Although some fair bags have been made this year (1888) in the Mahl, the season has not, I think, been a particularly good one, and the 'unfavorable weather at the early part of the season may have influenced the fish in this river, as much as elsewhere. The river is now strictly preserved by His Highness Rajah Moti Singh of Poonch, to whom all fishing it are much indebted, and the bungalow is a most commodious one with four separate suites of rooms. At present (August 1889) there is no furniture in the bungalow or servants' houses, but it is hoped that these will in time be supplied.

As I have had several queries about this bungalow, regarding permission to occupy it, and also regarding permission to fish the Mahl, I here take the opportunity of mentioning that no permission is required, nor is anything charged for occupying it. As however both the bungalow and the preservation of the river were both effected at the instance of the Fishing Club, I think the least that anglers can do fishing the river is to join the Club.

There is a nice camping ground about 500 yards above the bungalow, and all supplies are readily obtainable. When the bungalow is completed, an Angler's Book will be placed in it, as at Tangrôt, for fishermen to record their sport in, and which should prove useful hereafter, as the book at present in possession of a shikari named Pir Bux has only a few casual entries in it, and as this man is not employed by every one, many entries of sport are consequently omitted. It would be most interesting if a complete record of the Mahl fishing could be preserved as at Tangrôt. A map of the Mahl is herewith given on a larger scale than the Anglers' Map, at the beginning of the book showing the various camping places, etc. Supplies are readily obtainable everywhere, and the inhabitants of the country and the Poonch officials are everywhere most civil and obliging and do all in their power to oblige anglers visiting the river. For visiting Dhalcote only, *i.e.* staying at the bungalow, a perwanah is not necessary, nor is it higher up the river, but if going as far up as Bagh it is perhaps as well as to obtain one, which is always readily granted. It is a very pleasant trip fishing both the Poonch and the Mahl taking in a few days at Tangrôt. If the first two months of the hot weather are chosen you must commence at Tangrôt and fish up the Poonch and down the Mahl. If the autumn months are chosen it is necessary to commence with the Mahl and finish up at Tangrôt. For sport I think the last two months, *viz.*, in the autumn, would be best. It is not, however, of much use being on the Mahl before September 5th or even the 10th. By doing this you could

get a fortnight or ten days on the Mahl; then cross over the hills *via* Parl (2nd route mentioned) and hit off the Poonch at the Mendola (Mendli) junction, and fish down to Tangrôt, having first arranged for a boat from Tangrôt to meet you at Kotli. For military men taking the last leave from August 15th to October 15th this trip could be easily done, and a pleasant stay could be made in Murree previous to starting to recruit from the heat of the plains, and to make arrangements and send one's baggage on to Dhalcote. By leaving Murree on September 5th, or even a little later, the Mahl could be fished for a fortnight, as also the Poonch, finishing up with a week at Tangrôt in the best part of the season. I think myself that there is better chance of sport in the autumn trips, and also it is not so hot as the first two months of the leave season. In this trip one could reasonably expect to get from six to seven hundred pounds weight of fish with fair luck and favorable weather.

As I said before the scenery and climate are excellent, and it is a trip to be thoroughly enjoyed.

I returned to Rawalpindi on June 13th having during this trip fished for 36 days, my total bag being 701 lbs. of fish, the biggest 24 lbs., which bag was made almost entirely on a 14 feet fly rod and medium single gut, and in some cases on the very finest trout gut procurable. For the Mahl I consider a frog the best bait of all, but a small all gold spoon is very good for the higher reaches of the river; and I believe if *Machai*, or maize seed, was generally used, as on the Nerbudda in the Central Provinces, good bags could be made with it. In only two or three pools, however, would they take this readily. A description of tackle recommended for frog will be found in Part I of this book.

Postal Arrangements.—Letters must be sent to Murree and then procured by coolie or private arrangement. In conclusion, I will add a diary by a member of the Club, from the Anglers' Book in possession of Pir Bux, which may prove interesting to anglers:—*May 15th, 1886.*—Fished the junction pool and caught three fish.

Water very clear. Weight 4 lbs.

8
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May 16th,—Moved camp about two miles up the river. Caught only one fish.

„ 18th,—Eight fish, weighing $6\frac{1}{4}$ lbs.

„ 19th,—Thirteen fish, weighing 21 lbs., biggest $7\frac{1}{2}$ lbs.

„ 20th,—Moved camp about two miles up the river. 28 fish, weighing $33\frac{1}{2}$ lbs., biggest $4\frac{1}{2}$ lbs.

„ 21st,—Thirty-seven fish, weighing 36 lbs.

„ 22nd,—Nineteen fish, weighing 20 lbs.

„ 23rd,—Twenty-six fish, weighing 28 lbs.

„ 24th,—Moved back to cross the Jhelum. Four fish, weighing 7 lbs. Biggest fish $3\frac{1}{2}$ lbs.

Total Fish: 139. Weight: $156\frac{1}{2}$ lbs.

All the fish were caught with small brass flying spoon and fine tackle as the water was very clear. The big fish rose readily to the “blue and yellow hackle” (spring fishing size), and the Michael Davitt salmon flies. We found the lower pools of the river very hard to fish as the banks are so steep. We found that the further we went up the river the better was the fishing.

(Sd.) R. J. PIKE,
(Sd.) W. G. WALKER, } *Suffolk Regiment.*

A map of the Muhl is herewith given.

4.—*Fishing Diary, Poonch River, Kashmir, by Captain Lumsden, Bengal Staff Corps.*

“September 24th, 1886.—Arrived at Kotli on Poonch River from Kashmir. Captain Mansel in camp there had just landed a fine fish of 28 lbs., which he hooked while wading in the lower reach. I had previously ordered two of the Tangrôt boats up to Kotli to meet me and a friend. The boats took seven days coming up, and I paid them the usual one rupee a day per boat, nothing extra. Boatman's name Rheim Alli, and my fisherman's or servant's name Hyder, both of Tangrôt. My baggage, tents, pony, etc., followed the river round the bends, while I travelled in the boat. No road, but in some places a village track, very stony and difficult. Coolies (10,

and supplies procurable by sending on a man daily in advance. My tent, a sowar's pal. Route unfit for ladies to attempt and malarious. Map alluded to is small scale District Map, sheet No. 29. The bag is the result of one rod.

September 25th.—Kotli.—Very hot. Thermometer in my tent at 9 A. M., 92°. Fished from 6 A. M. to 8-30 P. M. Spinning from boat in long reach down the river.

Fish 12, 8, 5, 4, 4, 4, 4, and 3 lbs.

5 P. M. to 8 P. M. in water holes near camp. Fly and spinning from bank.

Fish 6, 5, 4, 4, 2, 2 and 2 lbs. Lost 2 spoons and gut trace. Mapped out route and sent Tehsildar's chuprassie on to Baralli in advance.

September 26th.—Thatli.—A few huts, near village Baralli, left bank about 6 miles. Supplies and coolies satisfactory. Village high up on the rocks. River very rapid and running in a narrow channel. Boat shipped a lot of water over the rapids, some of which are dangerous. Fished from boat in some excellent pools, and in some short but likely looking reaches. Fish very strong and healthy, and caught on an Eaton and Deller's $2\frac{1}{2}$ -inch spoon and 14-foot rod.

The fish all fought very gamely. Fish—A. M., 10, 10, 8, 8, 6, 6, 4, 4 and 4 lbs.; P. M., 10, 9, 5 and 3 lbs. Excessively hot and close by the river.

September 27th.—Left Thatli for very small village (only a few huts) of Chak on left bank, about five miles. Supplies and coolies scarce. Chak is about two miles from Guepoora where supplies are procurable. Had to pitch tent in the open, as there was no shady tree within sight. River full of large boulders and some very good fishing reaches. Thermometer at 9 A. M., 94°. Boat damaged a little over the rapids; fish giving very good sport.

Fish—A M., 9, 8, 8, 6, 6, 4, 4, 4, 3 and 3 lbs.; P. M., 14, 12, 12, 8, 5 and 5 lbs.

September 28th.—Moved to village called Nar, about eight miles on left bank opposite to village marked Dagar on the map.

Supplies and coolies satisfactory. Camped under a shady tree close to the river, called by the villagers "Bearer." Shot a few jungle cats and passed many sandstone hills full of blue rock pigeons.

Fishing good ; pools deep and stony ; lost three large fish by hooks breaking.—A. M., 9, 8, 7, 7, 6, 5, 4, 4 and 4 lbs ; P. M., 12, 10, 9 and 5 lbs.

September 29th.—Moved to village Kirmal on left bank six miles, opposite to Sooroo on the map. Camped under some shady willows close to bank. Supplies and coolies plentiful. Reaches and pools numerous and good.

Fish —A M, 10, 8, 8, 7, 6, 6, 4 and 4 lbs ; P. M. 9, 6, and 2 lbs.

September 30th.—Moved to Palak about five miles. A storm in the hills brought the river down red. Had to content myself with shooting blue rocks, which are plentiful.

Remarks.—Owing to my leave running short, I was unable to stop at the different places. Anyone wishing to do the trip, I would advise to travel as light as possible, and carry one day's supply of *atta* for all hands."

General Notes on above.—From Captain Lumsden's very interesting account of fishing in the Poonch, it will be seen what magnificent sport is obtainable in it. Captain Lumsden's bag being 424 lbs. of fish in five days' fishing, being an average of 84 lbs of fish per diem, and all taken on 14-foot rod and light tackle.

5.—*Sport in the Poonch*, by CAPTAIN J. Y. ALLAN.

23rd March, 1886.—I gave Jungoo a good turn this morning, but the Poonch is still rather high, though nearly clear enough. I did not stir a fish or see one ; the morning was then dull, and no sun. At 10 o'clock I went down to the Junction and touched a fish, the first turn in "L," I fancy outside. I shortly afterwards got into a good fish which played well into the Jhelum. I landed him in about 15 minutes, a clean well-shaped fish of 37 lbs. The sun has come out, and if it will only keep light, I expect to do something after breakfast.

29th March, 1886.—The fishing since the evening of the 25th has been very disappointing. On the following morning I got one fish, then down came the flood again, and the river was quiet and unfishable till yesterday when it looked in fair order, but was still very cold. In the afternoon, three boats were out, but although the water was much warmer, the fish were not on the take; however, after coming down from Jungoo about 5.30 P.M., I found Colonel Hawkins playing a fish, which he landed, a 10-pounder, and I had hardly let out my line, when I hooked a fish which ran so hard, and would not be denied, that I thought I had hold of a 40-pounder; however, I stopped him at last and landed him in still water, a nice male fish of 17 lbs. hooked outside. Colonel Ford shortly afterwards hooked a fish in the same way; it turned out to be 15 lbs. Last night we had a slight storm, and the Poonch, although not higher, is slightly colored red.

The sky has been very overcast all the morning, and rain falling all round.

There were four boats out, but not a fish was touched; it is now looking a little like clearing, but I fear either rain or melting snow.

6.—*Notes on fishing at Tangrôt during March, 1895, etc., by*
CAPT. J. Y. ALLAN.

Sport during the month of March this year, was I should say better than for some years past, but the fishing water was very limited for the number of rods (an average of 6), so that with the exception of one of the party who fished steadily and had exceptional luck, individual takes were poor.

About 1,400 lbs. of fish were caught between the end of February and the 24th March, but during this time the Poonch was unfishable for eight days owing to floods and dirty water. There were also a good many fish lost through breaking of tackle. The largest fish caught weighed 54 lbs. This fish although hooked in the tail gave comparatively little play, and was landed in about 30 minutes.

Most of the fish killed during this time were caught spinning in the two casts, in the junction water on the right and left banks of the Poonch marked L in the Map in the Tangrôt Bungalow Angler's Book. The fish appeared to be unusually shy, and were never well on the take, the most killing time was from 5 P.M. till dark. This was probably greatly due to the water being constantly flogged without a rest. The long reach below the junction of the Poonch with the Jhelum, known as the Chucker, fished very badly as it has done now for some years back, and during this month very few fish were seen or killed in the celebrated Jungoo pool.

This pool fishes best in winter and early spring months, after spate from rain; at this time the fish are there in great numbers, but seem to clear out on the first heavy flood, towards the end of February or early in March, and little as a rule is to be done in this pool after the 15th March.

In January 1894, I killed in this pool in seven days 21 fish, weighing 370 lbs., and last December a good many large fish were killed here, while no fish at that time were caught in the Junction water.

THE POONCH RIVER.

The Poonch from Tangrôt up to Kotli and on to Poonch itself is a magnificent river, with many beautiful-looking runs and pools, but owing to floods and snow water in the spring and summer months and the river falling often very clear and low in the winter months, it is I consider a very uncertain river, and many fishermen who come on short leave, go away disappointed. Occasionally good sport is to be got at the mouths of the tributaries of the Upper Poonch where the fish run up to spawn in the spring, and during the months of August, September and October, the river often fishes well from Poonch right down to the Junction with the Jhelum.

As a guide to brother Anglers, who may come here for the first time, or have little experience of Mahseer fishing, I give a list of what has proved to be the best baits of late years. I refer entirely to fishing in the heavy waters for large fish.

1. *Natural Baits*.—I would give the preference to dead bait as perhaps the most killing of all; generally a small Mahseer fry of from 3" to 6" long, but they are often difficult to procure, and I have fished little with dead bait myself. There are many mounts for these as described by Capt. Lacy, Mr. Thomas and other practical fishermen, but I prefer a single treble.

2. *Devon and Phantoms*.—Devon Minnow, brown and silver, grey and silver, and blue and silver, also all gold, of from 3" to 5" (this length exclusive of the tail hooks); the treble hooks on the mount where eyed hooks are not used should be very carefully and strongly mounted, on either double or treble salmon gut or fine brass 3-strand wire, or reliable gimp; the hooks should be strong, at the same time in proportion to the size of the minnow, and not too thick and heavy, as is often the case. I have used chiefly brass wire, and found it as reliable as anything; I would recommend a double swivel in preference to a single one, as is generally used, and so mounted that when the side hooks are pulled home in the slot of minnow only about one half or less of the top swivel projects beyond through head of minnow, just sufficient to allow the looping on of trace, and if preferred a buckle swivel may be used.

Phantom Minnows of from 3½" to 7", sole skin and rubber minnows, are also excellent baits, but are more easily damaged by the wrench of a big fish, and are seldom mounted strong enough by the Home makers; when used they should be always weighted with lead to avoid the necessity of weighting the trace or line, which often produces disastrous results by fouling the bottom.

3. *Spoons*.—I consider a spoon known as Eaton and Deller's scaled-back spoon in all sizes (for large fish) from 2" up to 4" as by far the best, silver and gold or all silver, the best sizes 2½" to 3¼", but occasionally equally good work is done with the spoon of the old dessert or gravy spoon pattern, or with a common bazaar-made spoon either brass or copper partly or wholly silvered.

Traces.—I have used for some years almost entirely fine

3-strand twisted brass wire of different thicknesses according as to whether I am fishing fine or coarse. I have found traces made up of this very reliable, and less liable to break from kinking than twisted steel wire; for finer fishing when the water is clear or smooth, I have found the single steel wire, as sold by Henry Horwood Killin, Loch Tay, Perthshire, very satisfactory; this wire is sold in reels of three thicknesses, the breaking strain of the thick quality is 32 lbs., and the thin wire is as fine as thick salmon gut; when made up in lengths of about two feet between swivels it is not liable to kink. Many fishermen prefer good salmon gut, but traces of this are far more expensive, and I consider fully as liable to break as the wire. Messrs. Allcock I see advertise a twisted wire very pliable, on which a knot can be tied and which does not readily rust, and no doubt as wire is being so much used at home now in salmon fishing, many improvements will be made.

It should be borne in mind that a free running winch and a pliable (but at the same time stiff) rod saves much tackle and many disappointments in Mahseer fishing.

Hooks and Swivels.—The sizes of treble hooks I recommend as most useful are Thomas' Nos. 2/0, 1/0, 1½, 1, 2, 3, 4, 5 and 6.

Swivels of the following dimensions in inches: ½ in., ¾ in., 1 in., 1½ in., 2 in., 2½ in.

Double swivels 1½ in., each swivel.

Buckle swivels 1½ in., 2 in.

Double buckle swivels are the best. Plated and brass swivels are on the whole preferable to plain steel.

Lines Nos. 2, 3, 4, in the list of Brown of Aberdeen, are the most useful sizes; I prefer No. 3, 80 to 100 yards of waterproof silk line with a similar quantity of hemp line, spliced on.

The winch should take 200 yards of line, and it is always advisable to have a spare waterproof line in tackle box.

The rod is a matter of choice, which I will not enter on."

P. S.—*Capt. Allan writes on 25th April, 1895:—*

Snow water and floods go much against sport and make it

very uncertain at all times of the year. At Tangrôt itself, March and October used to be considered the best fishing months; but of late December, January and February have proved fully as good, and, provided there has been a spate in the river, sport is certain during the winter months for a few days till the river has again fallen too low and clear. This applies to Jungoo pool on the Poonch, and other pools higher up the river; but the junction water at Tangrôt is of little good till the middle of February. In years that the snowfall has been heavy, like the last two years, May generally proves a far better fishing month at Tangrôt than April; and I believe February and March would often prove a good time on the upper waters, before the heavy snow water runs. August and September are the most certain months for good sport on the Poonch between Poonch and Tangrôt, and the most killing places are at the Junctions, where the smaller streams run in, viz., Swan, Mendola, Rungur and Bhan Junctions. Brown as well as silver and gold minnow, 4 in. for large fish, have proved the most killing bait of late; but when the fish are shy and not well on the take, dead bait will often take a fish when nothing else will, the drawback being the difficulty of procuring it.

6.—*Notes on Fishing in the Rhunghur River, extracted from the Tangrôt Anglers' Book.*

“In case anyone should have the same bad luck as myself as to arrive at Tangrôt and to find the Poonch in a state of flood and perfectly unfishable, I would recommend him not to lose time by waiting for the river to clear, but to move up at once to a place called Hil, about three miles this side of Kotli (Kotli is about 40 miles from Tangrôt), for here there is a small stream called the Rhunghur, and at its junction with the Poonch is a grand place for fishing. From the 25th April to the 3rd May (1876), during which time the Poonch was more or less flooded with snow water, I landed 69 fish, many of which were upwards of 20 and 30 lbs., and two or

three over 40 lbs. My largest was 47 lbs. The Rhunghur itself is a charming little river, where the fish take fly well. The largest I got with fly was 15 lbs. The man I had with me to carry my rod, etc., was one Elahi Bux of Kotli, and I recommend him as being very useful and knowing the river well."

(Sd.) W. J. MORRIS, LIEUT.-COLONEL,
Madras Cavalry.

7.—*Notes on the Mahl compiled from various sources by*
G. H. LACY, ESQ.

The road by Thanda is most laborious, particularly the second march from Thanda to Dhalcote, which is a descent of 5,000 feet, and then up again certainly 2,000, down again to the river, and having crossed it, up again another 2,000 feet and down. It is quite unrideable, *i.e.*, this second march. Another and more convenient route, although longer, is as follows:—Go out by the *New Kashmir* road 15 miles to the mile stone marked 12 (the miles being measured from Kohala and not Murree) to a place called Phugwari, where there is a bunnia's shop. As far as this you can gallop, or drive, and tongas now run by this route. At Phugwari you turn off to the right, and make down to the right bank of the Jhelum River to the village of Namb Ramah, below which is the Quaddar (or Kwadra) Ferry, the village of this name being in Kashmir territory on the opposite side. From Phugwari to Namb Ramah is about three miles, and you descend perhaps 3,000 feet. It *could* be ridden, but in two or three places you would have to dismount. Having arrived at Namb Ramah, you take the road running straight down the right bank of the Jhelum to Dhalcote Ferry, which is about 12 miles. This road is almost level the whole way, and is easily rideable, and in some places one could canter along for a good bit. In perhaps half-a-dozen places it is washed away for a few yards, at which it is necessary to dismount. It is, however, hoped that these places may be repaired, and application has been made by the Club to the District Authorities to do so. If this can be done, one could get from Namb Ramah to Dhalcote

Ferry on a good pony in certainly two hours or under. With ponies laid out, or by driving the first march from Murree, this is certainly the easiest and best way to go by.

I would, however, advise anglers to send their baggage on ahead by the other route *via* Thanda, as there is much difficulty in procuring coolies at Phugwari; and also, although in a less degree, at Namb Ramah. At Thanda they are easily procurable, and the lumberdar of this village, Rais Boodhe Khan, is always most civil and obliging to travellers. If the angler is, however, not pressed for time, and is travelling on foot, I am not sure that the Thanda route is not the best to proceed by. The other route is, however, best if a dāk of ponies can be laid out, as one can ride straight through, with the exception of the piece between Phugwari and Namb Ramah, and part of the road after crossing the Ferry below Dhalcote.

There is no actual village of Dhalcote, but the old Fort at the junction of the Mahl with the Jhelum is called Dhalcote. The village near the camping ground is Tain, and the couple of huts between the camping ground and the bungalow are called Kare-ke-dhun; this is in fact the proper name for the big pool called the Sprouston Dub in the map, which is just above the camping ground. I would further caution my readers who may go to the Mahl from Murree to send their baggage on full three days ahead; also that there are three villages, named Namb Ramah, close to each other. The one referred to is close above Jhelum River.

I have been often asked to explain whereabouts the road, or rather path, to Dhalcote *via* Thanda leaves Murree. On starting from Murree you pass Kuldunnah and go along the road towards Gharial and out on to the new Kashmir road past what is known as the Bunnia's shop; about a mile beyond this the road makes a sharp turn to the left almost at a right angle, and it is here that you leave the road and strike into the path to Thanda.

I would mention that this year, 1889, from April to June, the fishing in the Mahl has been very poor. Many members of the Club have been to the river, but all, with one or two exceptions

returned with practically blank bags. Two members who fished for three weeks all up the river, only got some 13 lbs. of fish between them. What has happened to the river no one knows, or whether this bad state of things will continue it is impossible to tell. I mention this, as I do not wish my readers to be carried away by some of the glowing accounts given in certain parts of this chapter on the Mahl fishing. One thing is I fear certain, that since the river has been preserved by the Rajah: and I really believe it is to a great extent preserved, the fishing has deteriorated, and this is much to be deplored. In 1887 there were fish traps every 200 yards, and *machans* for shooting the larger fish! There were none of these in 1888, and I hear there are none this year, 1889, and yet the fish will not take! It is most extraordinary what has happened to the river, but we can only trust that it is temporary, and that next year good accounts of the Mahl will again be heard. It is a river easily over-fished, and the fish are shy, and the angler to be successful must fish with great caution, and regularly stalk the pools.

The bungalow at Dhalcote is now finished, but there is no furniture in it, nor are there any servants' houses yet built.

8.—*Notes on the River Mahl*, by WILLIAM MITCHELL, Esq.

“The Mahl River rises in Kashmir and flows through Poonch joining the Jhelum at Dhalcote, twenty miles below Kohala, It is twenty-four miles from Murree, first march, Thanda; second March, Dhalcote; Murree is thirty-nine miles from Rawulpindi by tonga. The road from Murree to Thanda is rideable, but from Thanda to Dhalcote it is quite unrideable in most places, and may justly be described as a very bad road. There is a bungalow built by Rajah Moti Singh of Poonch for sportsmen, and he has promised to do what he can to improve the road. Good camping grounds close to the river, and supplies obtainable without much difficulty.

The best time to visit the Mahl is from 1st of May to end of June, and again as soon as the water clears after the rains. The Mahseer seem to be of two distinct kinds, one kind averaging

from 1 to 5 lbs., very plentiful. These are believed to be one and two years old fish, which have not begun to breed, and which have not so far run down the big rivers in the winter, as far as the fish which are going to breed do. The other kinds are breeding fish, running from 20 to 60 lbs. These are to be seen in enormous quantities at the mouth of the stream in the month of May, where a sort of lake is formed of perfectly clear water by the rising of the Jhelum having caused a back-water.

The first mentioned fish take the spoon most greedily in May and June, and in the autumn take fly, phantom, and spoon very freely whenever the water is in order.

Hitherto the larger fish have been most cruelly used by the natives; *machans* were placed over every pool and rapid where fish were likely to show themselves, and a native sportsman was in each with a loaded gun ready to blaze at the fish the moment he showed. The spawning beds were the favourite places for the gunners. In addition to the gunners, every kind of fish trap that human ingenuity could devise was laid along the river; the consequence was that the larger fish were extremely shy, but a great improvement was noticed by Major Pike and Mr. Walker of the Suffolk Regiment when they visited the Mahl in June, 1886, and there is great hope that, with the protection Rajah Moti Singh of Poonch promises, that the Mahl will become one of the finest rod-fishing streams in India, besides being splendid spawning ground for Mahseer, for which it is especially suited.

The river is easily fished from the bank and by wading, except at the mouth where a boat would be a great advantage. The scenery is lovely; the heat in May and June is considerable during the day.

For the larger fish, natural bait and large spoons are the only baits I can recommend from my own experience.

It will be seen from the above that the Mahl is a very convenient river for a trip from Murree or the adjacent Gullies. There is an Anglers' book kept by a shikari, named Pir Baksh, in which a few anglers have recorded their takes, the best bag

apparently being 232 fish in eight days' fishing by two rods in June, 1886; best day 88 fish, from 1 to 4 lbs.

Forty-two pounds is the largest individual fish recorded."

9.—*Notes on (1) Route from Kotli and Mendola on the Poonch to the Mahl, and (2) Route from the Mahl (Dhalcote) to Tangrôt via the right bank of the Jhelum River, by L. C. FRYER, ESQ., 45th Ratray's Sikhs.*

"From Kotli to Mendola, distance about 14 miles, the road is good. The real camping ground is at a place called Saira, which is a large village with a Tehsil. By going to Mendola, which is a small creek running into the Poonch, some fishing can be obtained. The camping ground at Mendola is about a mile from Saira, and supplies and coolies are easily obtainable from the latter place, by making arrangements when passing through. There are some nice pools in the Mendola, holding fish of 4 and 5 lbs.

Mendola to Jira, the second march, is about 13 miles, the road is good, supplies and coolies are easily obtainable at Jira. In this march you leave the River Poonch.

Jira to Parl, the third march, is about 14 or 15 miles. The road for the first few miles is fatiguing, as it lies along the bed of a small river, and one has continually to cross and recross this stream; supplies are obtainable without difficulty at Parl, but coolies do not seem to be forthcoming for love or money, and after waiting six hours I only got eight coolies, although I required twelve.

Parl to Raoli, the fourth march, about 14 miles. The road for the last five or six miles is very tiresome, as it lies along the bed of a tributary of the Mahl."

(2) *Notes on the Route from Dhalcote on the Mahl to Tangrôt.*

On June 3rd left Dhalcote at 7 A.M., for Rampatan, it was a very hot march of about 14 miles. It is advisable to take supplies and also to keep the coolies one gets at Dhalcote, as no coolies can be got at Rampatan.

W

4th June, second march.—Left Rampatan for Sihor at 5:30 A.M., distance about 18 miles. I had breakfast at Patan, as it was too hot to march during the heat of the day. This was really a double march, as it is no use staying at Patan, for one cannot get coolies or supplies. I managed to get three mules at Patan, which had crossed at the ferry, to take me on to Sihor. The junction of the Goon is about one-and-a-quarter miles above Patan, and not near Rampatan, as marked in the Anglers' Map issued with the 1st edition of the Handbook. I should think when the Jhelum is lower and the Goon clear that some good fish could be got there, camping at junction, where, however, there is no shade. It would be necessary to take provisions for oneself and servants. When I passed it, the Goon was very dirty and water slack, and I did not fish. On 5th June marched to Bihor, third march, distant about 10 miles from Sihor, a very hot march. There is a small river at this place with fish running up to several pounds. On 6th June marched to Choa, fourth march, distance about 18 miles. The road is good and rideable the whole way, but I would advise no one to try this march during the day in the hot weather. The heat is simply fearful. I made a night march of it. The people of the villages near the camping grounds are most unwilling to come as coolies, and there is some difficulty in obtaining transport. Supplies are forthcoming without any trouble at all the camping grounds, except Rampatan and Patan.

I would advise no one to attempt these two marches without being provided with food for all hands for the days one is marching these two distances. Transport should also be taken to carry one through. Choa is one of the most delightful camping grounds imaginable. There are several splendid mango topes where one can pitch tents and wells of good water quite handy. There is a small river here which holds fish of 2 lbs. or so. On 7th June marched to Zabir, distance about 11 or 12 miles, fifth march. Good road, supplies obtainable. On 8th June marched to Bagam, where there is the Cusi Glen at the junction of the Cusi with the Jhelum, sixth march, distance about

15 miles; latter part of road very bad. Had made arrangements for a boat so as to fish the Casi junction, but it did not turn up, so I went on to Tangrôt, seventh march, distance about 8 miles; good road. It is impossible to fish the Casi junction without a boat, as the water is a hundred yards wide and has high perpendicular cliffs running down to the water."

RECAPITULATION TABLE OF MARCHES AND DISTANCES.

1st March.—Dhalcote to Rampatan	14 miles
2nd March.—Rampatan to Sihor	18 "
3rd March.—Sihor to Bihor	10 "
4th March.—Bihor to Choa	18 "
5th March.—Choa to Zabr	11 "
6th March.—Zabr to Bagam	15 "
7th March.—Bagam to Tangrôt	8 "
—			
TOTAL			94 miles.
—			

N. B.—The above distances are approximate only. From the above it would appear scarcely worth while for any angler to undertake this march unless he is fully equipped with carriage and supplies, without which, owing to the length of the marches and the badness of the road, it would be better to go back to Rawalpindi, viâ Murree, and then by train to Dina, and thence, to Tangrôt.

10.—Notes on the Mahl River, by W. R. LITTLE, ESQ., 21st Punjab Infantry.

"April 28th, 1887.—Fished the junction very unsuccessfully, only getting one $\frac{1}{2}$ -pounder with "Blackamoor" fly.

April 29th.—Moved up stream to Kare-ki-dan. Not a single rise.

April 30th.—Moved to Tungi Khel, but did nothing.

May 2nd.—Moved to Arja—Got seven fish, weighing 7 lbs.

May 3rd.—Moved to Mangh, nine fish of $10\frac{1}{2}$ lbs.

May 4th.—Moved to Raoli, 15 fish of $14\frac{3}{4}$ lbs.

May 5th.—Moved to Bagh, 26 fish of 25 lbs.

May 6th.—Fished below Bagh in the evening, but only got

six fish, weighing 7 lbs. I got one or two with fly; all the rest with a small gilt spoon about $\frac{3}{4}$ of an inch. I tried a silver spoon both morning and evening, but it was of little use. From Raoli to Bagh is far the best piece of water for small Mahseer. From Bagh I went over the hills and cut into the Baramula road. First march—Kwaja, short and easy. Second march to Kilana, over small pass 8,300 feet—easy march. Third march to Uri—a long march.

This path is very convenient to any one fishing the Mahl in April and May, before going on to Kashmir."

11.—*Notes by* LIEUTENANT-COLONEL H. J. KINSMAN,

Royal Artillery, regarding a fishing trip to the Mahl.

"Arrived on the Mahl on September 11th, 1887. Water clear, but river very full; did no good for some days. Got a few fish, biggest $2\frac{1}{4}$ lbs., with small brass spoon. Hooked and lost a heavy fish on "Cock-of-the-Walk" fly at D (the "Crag Pool"). Killed several smaller ones on that and the "Blackmoor," grilse size. Have tried fly, spoon, and frog. Spoon seems undoubtedly the best bait at this time of year. Tried most of the heavy water with frog, but only killed four or five fish, nothing over 2 lbs. The water certainly improves as you get up stream, particularly from Thundi-Dhun to Arja. Up to date I have killed 61 fish, the biggest $3\frac{1}{2}$ lbs. Climate here now perfect. Water in excellent order. On the 24th killed 14 fish weighing $17\frac{1}{2}$ lbs., best fish $3\frac{1}{2}$ lbs. Up to September 25th had killed 85 fish, weighing 91 lbs. River very clear, but fish will not take anything, so left for Murree. There are a good many teal on the river, and it is worth while taking a gun."

12.—*Notes on the Mahl, by* Captain H. R. LOVETT, *King's Royal Rifles, dated 18th May, 1887.*

"I have just returned from a 10-days' fishing trip to the Mahl River, and send you an account of what I did.

The river was apparently in very good order, but the fish did not take well. There were quantities of big fish at the

mouth, but the water was slack and rather dirty, and they would look at nothing. I caught a 10 lb. fish a little higher up with a Chilwa; about three miles up at the next camping-ground, there is a lovely pool with, I should think, at least 50 big fish in it; you could see them swimming round the pool in shoals. I managed to hook one of them, on a dead frog, on very light tackle, and after $2\frac{1}{2}$ hours' play gaffed him. He weighed 35 lbs., and was very lightly hooked. I got other small fish, but very few, and at last they gave up taking, so I came away. The bait of all others for this river is frog. I tried everything else except *atta*. The river is full of fish, and I found no difficulty about supplies."

13.—*Notes on the Goon (or Goimel) River in Poonch Territory, compiled from various sources.*

"The Goon or Goimel, as it is called, rises in Poonch territory near Parl, and flows in a south-westerly direction till it joins the Jhelum at Patan, about 25 miles or more below the junction of the Mahl at Dhalcote. This river is believed not to be fishable for more than a mile above its junction with the Jhelum, being merely a mountain torrent or rocky nullah, but there are some pools near the junction. I have only heard of this river being fished once or twice, and I believe a few small fish were caught last April near, or at the junction, but the natives on the Mahl have given me good accounts of it, and informed me that a Sahib caught three very large fish there some fourteen years ago. This river was visited by a member of the Fishing Club, Mr. L. C. Fryer, in June last, and I was in hopes of hearing some detailed account of the fishing, but owing to the water being dirty and there being no good camping place or apparently any village near, this gentleman was unable to give the river a trial, and he was moreover pressed for time. This difficulty of a good camping ground near a village, and the difficulty of getting supplies, is an obstacle which is against sportsmen frequenting this river, but when the Mahl is crowded at Dhalcote, it would I think be worth while to pay it a visit.

The angler should however take supplies, and arrange for coolies from Dhalcote. I do not fancy the river would afford fishing for more than a week or so, if that. The junction of the Goon is four marches from Murree—*viz.*, 1st, Thanda; 2nd, Dhalcote (Mahl junction); 3rd, Rampatan, 14 miles from Dhalcote; and 4th, Patan, about 10 or 12 miles from Rampatan. Total distance about 50 miles from Murree. The notes by Mr. L. C. Fryer in Article No. 9 in this chapter give information about this route beyond Dhalcote.

It is probable the fish in this river would take frog, the same as in the Mahl."

14.—*Fishing at Shekopur, River Jhelum*, by G. H. LACY, Esq.

Shekopur is five miles from the Dina Railway Station, and 13 from Jhelum, and is the first march to Tangrôt. The roads both from Jhelum and Dina are very good. There is a bungalow about a mile from the fishing. No Khansama, but furniture and a certain amount of crockery. Tents can be pitched close to the fishing grounds, but there are no very good sites. October and early part of November are good months. The fish, Mahseer, run up to 40 lbs. weight, but generally are caught from 5 to 15 lbs. Rohu run up to 18 lbs., and a fish called Luss up to 5 lbs. The place for fishing is at some *atta* mills, or "panchakkies," where there is a good run. A boat is almost necessary to fish it successfully, and should be anchored at the head of the run, and the spoon allowed to run down the rapid; casts being made from time to time across to the further side of the river which is some 20 or 25 yards broad. A spoon $1\frac{1}{2}$ to 2 inches silver and brass or gold, is recommended.

The water should be clear, and the best times in the day are from 9 to 11 A.M., and from 3 to 4 P.M. The most successful day I ever had here was between 9 A.M. and 3 P.M., during the heat of the day, my bag being $90\frac{1}{2}$ lbs. weight of fish. This was on October 8th, 1883. There is also a swim just in front of the bungalow where fish will occasionally take *atta*, but it is uncertain work at the best times.

No. 15.—*Kashmir fishing.*

Fishing is obtainable at the following places in Kashmir :—

Hatti, on Murree route, bungalow.

Kohala, on Murree route.

Domel, 40 miles from Murree, 80 from Rawalpindi.

Pohra river joins Jhelum near Sopor, two marches from Srinagar.

Sopor, Ninghal, Banair, Hajan, Symbol, Shadipur.

Wular lake, near Sopor.

Baramula, one march from Sopor.

Pandritan, two miles above the visitors' bungalows at Srinagar.

Korwini, four miles from Islamabad, bungalow.

Pauzgam, three miles north of Aishmakâm encamping ground, river Liddar.

15A.—*Notes on fishing in Kashmir, by MAJOR R. J. PIKE, the Suffolk Regiment.*

The river is the *Pohra* which joins the Jhelum river near Sopor, which is two marches from Srinagar. The river is slow running, but with runs here and there. The best way to reach the water is by boat from Sopor to Bargam, called by the "manjees" (native boatmen) Poorah, which is the first and best place I have fished.

There is a good camping-ground at Zolerah and also shooting, and there is a spring of very good water at Zolerah, and there are a lot of sacred fish in this spring. When they are on the move, fish are always to be caught at Bargam, distant from Zolerah $1\frac{1}{4}$ miles. I fished at Bargam, Wadi-pore, Coolengam, in May, June and July (1887); and at Khupwara, in August. The name and average size of the fish to be caught are as follows :—

(1.) The Chirroo.—This fish runs, they say, to 14 lbs., the best caught by me was $7\frac{1}{4}$ lbs. Average about $1\frac{1}{2}$ lbs.

(2.) The Gaurd—said to reach 10 lbs. The best caught was 3 lbs. Average between $\frac{1}{2}$ and $\frac{3}{4}$ of a pound.

The best way to fish at Bargam is as follows:—A small Devon Minnow, $1\frac{1}{4}$ inch silver and brown (Jeffery's Plymouth pattern) killed five-sixths of my fish. Spoon, No. 2 size, and natural bait are best in heavy water. Smaller fish may be caught with fly in backwaters, both above and below the heavy water. From the left bank, fish from the shore unless the water is very high. At Wadipore and Coolengam, fishing can be carried on either by wading or from a boat; at Khupwara by wading. Bargam is the best place; the best cast is about half way down the run, cast into opposite back-water, and draw the minnow slowly towards you and down stream; use no lead with a Devon Minnow, but with spoon as heavy a lead as possible.

The second best cast:—Anchor boat above heavy water and fish where water first breaks.

The third best cast is in the heavy water on right side of the river, and Ramzama, boatman, showed me the water. From 5 to 8 or 9 A.M., and from 4 to 6-30 P.M. is the best time to fish. During June, and when the mulberries are ripe, the fish feed on them greedily; you may catch a few with a black fly or an imitation mulbery. On the other runs, the following flies killed well:—

		<i>Body.</i>		<i>Wing.</i>		<i>Hackle.</i>
No. 1	...	Red and black	...	Mallard	...	Red.
„ 2	...	Green	...	Teal	...	Brown.
„ 3	...	Green	...	Grouse	...	Red or black.
„ 4	...	The Alexandria
„ 5	...	The Black Palmer

If the fish were on the move, any of the above were killing; but No. 1 for choice, on any day, or at any time.

The fishing by itself is not worth the journey, but when combined with shooting, is quite “good enough,” and makes a pleasant change. I fished on 19 days, for 1 to $1\frac{1}{2}$ hours a day, and got in all 172 fish, weighing 121 lbs.

The best fish scaled $7\frac{3}{4}$ lbs. The river is unfortunately much poached, both by netting and fish traps, and by the male population turning out and muddying the water, and then catching

the fish in their hands. Were it preserved, the fishing on the higher waters would be very good.

16.—*Notes on Fishing at Domel*, by WALTER DENNY, ESQ.

Domel is in Kashmir territory, and about 80 miles from Rawulpindi (40 from Murree). The fishing ground is at the junction of the Kishengunga and Jhelum rivers (very rapid water).

The best way to reach the water is to go to Kohala from Murree by pony, 18 miles all down hill. To Deywal (10 miles), the road is shady; remaining part exposed to the sun. Thence by tonga from Kohala to Domel about 23 miles, say about four hours by tonga. Ponies and ekkas are also procurable and one can halt at Dulai, 11 miles. There is an exceptionally good bungalow at Domel, recently built by the Kashmir Government; Khansama, all stores, wines, etc., procurable. There are also good sites for tents, the best time of the year to visit the water is from the beginning of March to the end of April; and again towards close of the rains, say in August. The fish are Mahseer and Kashmir Trout. Mahseer have been caught up to 40 lbs. I lost myself some very heavy fish for want of steel traces; and could not land them on gut ones. If fishing from the bank, *atta* must be used. I was able from a gangway on wheels to get to water suitable for spinning, and was successful with the Panjab spoons. A wooden platform is now being built, which will enable me to get at the best water. With one or two long ropes, logs of wood could be moored in a good position, no boats being obtainable.

Treble gut casts were useless for landing large fish. Landing is difficult owing to the boulders and heavy water. Steel traces are recommended. Color of water is slate blue. I caught nothing at midday. From very early morning to 10 A.M., and 3 P.M. to dusk are the best times. The bungalow is nicely situated close to the river.

General Notes on Domel.—Colonel Woodruffe, who fished at Domel in 1886 several times, was very successful in August, fishing with *atta*, getting seven fish in one day.—biggest 40 lbs. He found that at that time the fish would take no other bait except

atta, and also that the fish did not run with such force as they do at Tangrôt and other places. The 40-pounder was taken on a light rod, and only 50 yards of running line.

17.—*Note on Fishing in the Jhelum River, near Sopor, in Kashmir, by MAJOR R. J. PIKE, Suffolk Regiment.*

District Kashmir, river Jhelum, at following places :—

- (1.) *Sopor*.—At which there are two bungalows, but out of repairs.
- (2.) *Ninghal*.—Tents might be pitched here, but best to live in boats.
- (3.) *Bannair*.—Best to live in boats.
- (4.) *Hajhun*)
- (5.) *Symbal*) —At these three latter places tents can either
- (9.) *Shadipur*) be pitched or one can live in boats.

The best time of the year to visit these places is as follows :—

- (1.) *Sopor*.—For Masheer in June and July; for Kashmir Trout, May to September.
- (2.) *Ninghal*.—For Mahseer from 15th July to 15th August.
- (3.) *Bannair*.—Kashmir Trout in August and September.
- (4.) *Hajhun*. Ditto ditto ditto.
- (5.) *Symbal*.—From July to September.
- (6.) *Shadipur*.—In May, June and July.

The fish are as follows :—Mahseer, which at Sopor average 8 to 10 lbs; at Ninghal they may be any weight.

Chirroo and Gaurd average about 1½ lbs., but some run to 18 or 20 lbs.

The baits which appear to be most successful at the above places are as follows :—

Sopor.—Natural bait; devil 1½ to 2½ inches; a flying spoon; Devon Minnow, and a fly with green body and teal wing.

Ninghal.—Natural bait; frog; devil, and spoons of sorts.

Bannair.—Devon Minnow ; devil, No. 3 flying spoon, and fly.

Hajhun.—Devon Minnow, large and small, Nos. 2 and 3 flying spoons and natural baits.

Symbal.—Same as Hajhun—Flies black and red body, and grouse wing, or a white fly best.

Shadipore.—I did not fish here, but heard that spoons of sorts kill best.

All the above places are fished from a boat. The best casts at Sopor are above and below the arches on each side of river, and opposite the Hindoo temple below the bridge.

At Ninghal, the boatman will take you over the ground. There are three men at Sopor who go out with gentlemen, viz., Soupura, and Azais his son ; and Kurreem, son of Khamana. I prefer the latter as he does not speak unless spoken to. There is a very good mistri at Sopor who turns out spoons, etc., at a low price, and makes hooks.

The best time of day to fish the following places are as follows :—

Sopor.—4 A. M. to 9 A. M. and 4 to 6 P. M.

Ninghal.—3 A. M. to 9 A. M. and 4 to 7 P. M., and by moonlight. The water should neither rise or fall, and it is useless to fish if the wind gets up.

Bannair.—Cloudy days best. Best time 3-30 A. M. to 6 A. M. ; 7-30 A. M. to 10 A. M. and 5 to 7 P. M., and the lower the water the better the sport. Ramzama my boatman knows this water wonderfully well, and also Sopor, Ninghal, Hajhun and Symbal.

Hajhun.—Same remarks as for Bannair ; there are said to be Masheer here.

Symbal.—Same remarks as for Bannair ; best fishing at arch on left bank ; next best place at arch on right bank. The fishing here is said to be good in high water, and Masheer can be caught at times.

Shadipore.—Fishing really on Scinde river, about half mile from junction with Jhelum. Early in the season when the Jhelum runs high is best for this place.

The following extracts from my fishing book may be of interest—

SOPOR, 1887.

May 17th.—5 Kashmir trout, weight 5 lbs., best fish $1\frac{3}{4}$ lbs. on spoons Nos. 2 and 3 flying.

May 18th.—13 Kashmir trout, weight $10\frac{1}{2}$ lbs., best fish $1\frac{1}{4}$ lbs., on No. 2 flying spoon and fly.

May 19th.—2 Kashmir trout, weight 3 lbs., best fish 2 lbs., one on fly and one on spoon. Heavy storm came on.

May 20th.—7 Kashmir trout, weight $6\frac{1}{2}$ lbs., best fish $2\frac{1}{2}$ lbs., taken on fly and flying spoon.

June 6th.—13 Kashmir trout, weight 10 lbs., best fish $1\frac{3}{4}$ lbs., on flying spoon.

June 7th.—1 Mahseer of $2\frac{3}{4}$ lbs., and 11 Kashmir trout of $11\frac{1}{2}$ lbs. Best $2\frac{1}{4}$ lbs., on No. 2 flying spoon and natural bait.

Total caught at Sopor:—1 Mahseer of $2\frac{3}{4}$ lbs. and 51 Kashmir trout $46\frac{1}{2}$ lbs.

NINGHAL.

August 12th.—2 Mahseer, weight 13 lbs., best fish $10\frac{1}{2}$ lbs. 1 Kashmir trout, 6 lbs., on two-inch Devon Minnow and frog. Saw a 39-pounder caught here.

August 15th.—1 Mahseer, weight 47 lbs. caught on frog, weighed four hours after capture; landed in 29 minutes. Length, $48\frac{1}{2}$ inches; girth, $26\frac{1}{2}$ inches.

August 16th.—20 Kashmir trout, weight 8 lbs., best fish $1\frac{1}{2}$ lbs., with fly.

August 17th.—22 Kashmir trout, weight $7\frac{1}{4}$ lbs., best fish 1 lb. Total caught at Ninghal:—3 Mahseer, weighing 60 lbs., 43 Kashmir trout, weighing $21\frac{1}{4}$ lbs.

BANNAIR.

August 18th.—28 Kashmir trout, weighing $17\frac{1}{4}$ lbs., best fish $1\frac{1}{2}$ lbs.—18 of these fish on Devon Minnow, 5 on fly, 5 on No. 3 spoon.

August 19th.—44 Kashmir trout, weighing 53 lbs., best fish 3 lbs.
—Forty on flying spoon, 2 on fly, 2 on Devon Minnow.

August 20th.—28 Kashmir trout, weighing 49¾ lbs., best fish 4 lbs.—25 of these on large Silver Devon Minnow.

August 21st.—13 Kashmir trout, weighing 19½ lbs., best fish 3½ lbs. on Devon Minnow.

August 24th.—20 fish, weighing 24 lbs., best fish 3¼ lbs., 10 on Devon Minnow, 5 on devil, and 5 on spoon.

August 26th.—7 Kashmir trout, weighing 11½ lbs., best fish 3¼ lbs., on two-inch Silver Devon Minnow. Ran a big fish which seemed like a Mahseer, and which got under the boat, but was lost by hooks straightening.

Total caught at Bannair :—140 Kashmir trout, weighing 185 lbs.

Hajhun.

August 22nd.—19 Kashmir trout, weighing 31 lbs., best fish 4¼ lbs., 14 on Brass Devon Minnow, 2 on Silver Devon Minnow, and 3 on flying spoon.

August 23rd.—11 Kashmir trout, weighing 15½ lbs., best fish 3 lbs., all on Devon Minnow—lost a large fish in the morning.—During the day a native netted the runs and spoilt the fishing.

Total caught at Hajhun :—30 Kashmir trout, weighing 46½ lbs.

SYMBAL.

August 25th.—12 Kashmir trout, weighing 7 lbs., 6 on fly and 6 on Devon Minnow.—Water was neither high or low; only caught rising fish, river very dirty, grass and reeds coming down, and gave up fishing.

General Notes.—The above account of fishing by Major Pike goes to prove that the Devon Minnow is an excellent bait for Kashmir fishing. This gentleman has given the Sopor

mistri a pattern of the Minnows used by him, which may be of use to anglers visiting Sopor hereafter. Major Pike saw Mahseer of 39, 24, and 16 lbs. caught, and heard of others of 27, 32, 38, 42 and over 50 lbs., respectively, in this locality.

It is believed that at Baramoola, one march from Sopor, there is good fishing, and at Symbal and on some parts of the Woolar lake, fishing is obtainable. I have heard of fish being taken at Kohala on the Murree route to Kashmir, and for particulars about this I would refer my readers to the account of fishing at Kohala by Mr. Barton farther on in this chapter.

Notes on Fishing at and near Sopor, Jhelum River, Kashmir, by
L. A. GRAHAM-CLARKE, ESQ., *Royal Artillery.*

"I have just come back from Kashmir, and if any notes are wanted I send you a few for the new book. As regards the *Chirroo* and *Gaurd*. *Chirroo* is the ordinary Kashmir Trout and is called *Roo* sometimes. He is a poor fish to catch, as none I caught attempted to give any play at all. They run up I believe to 25 lbs. The biggest I heard of as caught this season was 25 lbs., I myself only got one 6 lbs., and up to that weight they are absolutely useless for sporting purposes.

Gaurd is the Kashmir word for "fish." Any fish is in their language called *Gaurd*. There is another fish called *Shoosh*, which is I believe generally caught on a mulberry, though I believe at times it will take a fly well. *Chirróo* take anything, but I should say, from my experience, a Devon Minnow or natural bait is the best. The average weight is from 1 to 2¼ lbs. As regards Mahseer, this season was an exceptionally late one, and I only caught one up to 12th June. I was, however, at Sopor for a month and only caught *Chirroo* during that time. I also tried Sambal, Gahul and Shadipur. All the Mahseer I caught on natural bait mounted on a single triangle. I found the remains of the pillars of the old bridge at Sopor a great nuisance as immediately a large fish is hooked, he makes for the pillars at once and winds the line round them, and then of course makes off, in almost all cases breaking the line. This is

I think the reason why so few large fish are brought to bag. I myself lost some very large ones. At least one ran out 150 yards of line at once, and others nearly as much. The left arch both above and below are the best places. Above is the best in the early morning, and below at noon and in the evening. I used to fish at these times but the fish are very uncertain in feeding. Sometimes three or four would take the minnow one after another when one had been fishing the same place for about two or three hours before. I found that the fish took best when the water was low and the weather dull and cloudy. I started a fishing book for anglers to enter their takes in and left it with Sopura, the boatman.

Below I give a detail of my bag, giving dates and number and weight of fish caught :—

July 12th (1888)—4 Mahseer, 16, 14, 10 and 9 lbs.—

Total 49 lbs. 2 Chirroo, 4 lbs.

July 13th—2 Mahseer, 10 and 2 lbs.

July 14th—3 Mahseer, 11, 9½ and 5 lbs.

6 Chirroo, 15 lbs.

July 15th—1 Mahseer, 8½ lbs.

6 Chirroo, 14 lbs.

July 16th—2 Mahseer, 9½ and 3½ lbs.

5 Chirroo, 7½ lbs.

July 19th—1 Mahseer, 4½ lbs.

1 Chirroo, 3½ lbs.

July 20th—4 Mahseer, 13, 7, 5 and 4 lbs.

1 Chirroo, 1 lb.

July 21st—3 Mahseer, 16, 7½ and 4½ lbs.

July 22nd—1 Mahseer, 11 lbs.

1 Chirroo, 2 lbs.

July 23rd—5 Mahseer, 22, 11, 7, 6, and 5 lbs.

2 Chirroo, 3½ lbs.

July 24th—1 Mahseer, 3½ lbs.

Total bag { 27 Mahseer, weighing 237 lbs.
24 Chirroo, weighing 49½ lbs.

The above fish were all caught at Sopor."

19.—*Notes on the Fishing in the River Towi (Bhimber,) by*
MAJOR MANSEL, 3rd Punjab Cavalry.

How to get there.—Nearest Railway Station, Gujrat.

Gujrat to Bhimber	28 miles by mail cart.
Bhimber to Saidabad	12 miles.
Saidabad to Nowshera	10 „
Nowshera to Changus	14 „
Changus to Rajaori	1 „

The above four marches, riding or walking.

Mules for riding and lading and coolies obtainable at each stage, where there is a rest-house, and supplies are obtainable.

There are no natives of any use in giving assistance while fishing. Fish are plentiful, but wary. Recommended one 14-foot rod, double, and one 14-foot rod, single. Spoons one-and-a-half to two inches long. Single Salmon gut traces. A large rod is of no use.

Flies.—Small “Cock-of-the-Walk.”

Diary of Captain Mansel.

Date.	Place.	Weight.	River.	How Caught.	REMARKS.
1886 9th Aug.	Nowshera	<i>Nil</i>			Water less dirty ; thunder in air.
10th „	Ditto	<i>Nil</i>			
11th „	Ditto	5, 3 & 1lb.			
12th „	Ditto	<i>Nil</i>			
13th „	Ditto	<i>Nil</i>			Water dirty.
15th „	Changus	$\frac{1}{2}$ lb			
16th, 17th & 18th „	Ditto			Did not fish.
19th „	Rajaori,	<i>Nil</i>			
20th „	Ditto	1 $\frac{1}{2}$ lbs.			
21st „	Ditto	2, 1 $\frac{1}{2}$, $\frac{1}{4}$ $\frac{1}{2}$ lbs.			
22nd „	Ditto	2lbs.			
23rd „	Ditto	2lbs, 2lbs.			
24th „	Ditto	5lbs, 2lbs.			Thunder.
25th to 28th „	Ditto	<i>Nil</i>			Lost one over 20lbs. while be- ing landed ; and lost one about 15lbs. by hook drawing.

Diary of Captain Mansel—(continued).

Date.	Place.	Weight.	River.	How Caught.	REMARKS.
1886.					
29th "	Dilogra	<i>Nil</i>			Water dirty.
30th "	Ditto	7lbs.			
31st "	Ditto	<i>Nil</i>			
1st Sept.	Ditto	<i>Nil</i>			
3rd "	Ditto	7lbs.			Also to small fish.
4th "	Ditto	$\frac{1}{2}$ & $\frac{1}{2}$ lb.			
5th "	Ditto	1 & $\frac{1}{2}$ lb.			
6th "	Ditto	2lbs.			
10th "	Poonch	4 $\frac{1}{4}$, 2 & 1 $\frac{1}{2}$ lbs.			
11th "	Ditto	<i>Nil</i>			
13th "	Madhopur	5, 4 & 2 lbs.			
14th "	Ditto	4, 3, 2 & 1 lbs.			
15th "	Ditto	3 $\frac{1}{2}$ lbs.			
16th "	Mendola	4, 3, 2 & 1lbs.			
17th Sept.	Ditto	4, 4, 3, 1 & 1lbs.			
18th "	Ditto	$\frac{3}{4}$ lb.			
19th "	Tattapani	5, 1 $\frac{1}{2}$, 1, 1 & $\frac{1}{2}$ lbs.			
20th "	Ditto	11, 1, 1, 1, 1 & $\frac{1}{2}$ lbs.			
21st "	Kotli	<i>Nil</i>			
22nd "	Ditto	7 $\frac{3}{4}$, 2 & 1lbs.			
23rd "	Ditto	25, 1 & 1 lbs.			
26th "	Nowshera	1 $\frac{1}{2}$ lbs.			
27th "	Ditto	9 $\frac{1}{2}$, 4 $\frac{1}{2}$, 2, 1, 1, 1, 1, 1, 1, 1, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{3}{4}$ & $\frac{3}{4}$ lbs.			
28th "	Ditto	5, 4 & 2 $\frac{1}{2}$ lbs.			
29th "	Kuri	8 $\frac{1}{2}$ lbs, 5, 4 & 1lbs.			
30th "	Ditto	15, 13, 2 $\frac{1}{2}$ & 2lbs.			
2nd Oct.	Dinani	3, 2 & 1 $\frac{1}{4}$ lbs.			
3rd "	Ditto	4, 2, 1 $\frac{1}{2}$ lbs.			
4th "	Ditto	4 & 3lbs. & 3 fish weighing 35lbs.			
		Total weight of fish caught 378lbs.			

19a.—Towi (Bhimber) Notes by SURGEON-MAJOR W. CONRY.

" Fifty miles from Gujerat station. Only an ekka as far as Bhimber (28 miles). Then a broken hilly road with some large streams to ford. Not easy to ride in parts. Cashmere four-roomed rest-houses at each halt (*viz.* Bhimber, Saidabad, Nowshera, Changas Serai, Rajaori); cost of living small. Each rest-house has a tikader to supply necessities at officially fixed prices.

Y

I have fished two seasons, in September, when the snow water was on the decline. The temperature was unpleasantly high. A small tent and a pāl for servants advisable to render choice of water easier. Fish abundant and heavy. My rods were an 18-foot and a light 12-foot. The former I used for fishing from Nowshera down the river, where fish of any weight may be caught. I have seldom seen better water, or a closer succession of good rapids. Some scrambling is unavoidable, but there was no trouble to speak of. I took one 39-pounder from the tail of the run beside the Nowshera rest-house, and numerous fish above 5 lbs. I used plain and hogged spoons, and Peacock Harl and Cock-of-the Walk flies. Hogged spoons are great favorites of mine. They, sometimes, by their tendency to spin, give a character to a bad cast, which would otherwise startle the fish. I always use single salmon traces. About eight miles below Nowshera, a river unites with the Towi ; from that on, the water is excellent, and I recommend the junction of the rivers as a suitable camping spot. I got a 43-pounder about two miles below the junction. When camping out, of course, some elementary victualling arrangements should be made beforehand.

I learned two lessons in this neighbourhood.

1st—Not to use "K" boots when wading. It is true they don't let water in, but they also won't let it out, and after wading I had invariably to lie on my back and hold my feet up in the air to empty the boots. Besides, owing to the waterproofing, they become greasy when wet, and I got some sudden and irritating spills through being unable to keep my footing on the river boulders.

2nd—Many people think Mahseer will not take in thick water. I thought so too, but while staying in the Nowshera rest-house, with a fishing friend, a succession of freshets kept us in-doors for three days. One evening we both felt so bored by the delay, that we took our rods down to the adjacent rapid. Wading in at its head in pea-soupy water, within an hour we landed about 20 fish, the largest being 9 lbs. We were both

intensely surprised. We used spoons. The water above Nowshera is lighter, and I used my one-hand rod. Making Changanas Serai the headquarters, most pleasant light fishing can be had all around, and a little shooting behind the rest-house. I think it is useless to try fishing higher up towards Rajaori, owing to the netting and the large villages. Local rumour declares that the large deep pools of the Towi contain perfect whales. From curiosity, I exhausted considerable time, and every artifice, down to the homely *atta*, to verify the rumour, but quite without success. The largest fish I caught were in the rapids. The best pot-hunting method for the still pools I found to be to take parched Indian corn, and bore a small hole through the centre of one piece so as to let it go on a hook. Then throw it in, and let it sink with some 10 or 20 other grains having no hook through them. Fine gut is necessary. No lead, nor swivels. As I never keep a diary, I regret I cannot give detailed results of my fishing tours, but the bag of Mahseer teeth, which I was collecting at the time with the view of studying their arrangement, showed that I had had very fair success.

20.—*Notes on Fishing near Sialkot in the Rivers Towi, by*
CAPTAIN LUMSDEN, *Bengal Staff Corps.*

"April, 1885—Sport is to be got near Sialkot in the two rivers called by the natives of those parts the "Jummoo Towi" and the "Nowshera Towi."

The Jummoo Towi.—To fish or visit Jummoo, special sanction has to be obtained from the Maharajah. Visitors usually live in the guest bungalow and are the guests of the Maharajah. Fishing near any of the temples is forbidden. The bathing ghat at Jummoo and the *Panchakkies* a little higher up are the two places visitors are usually permitted to fish. At both these places fish from 2 to 25 lbs. weight are to be caught. There are good fishing places also below the bathing ghat. Wading and spinning a $1\frac{1}{2}$ -inch spoon are most successful. The Maharajah also lends visitors elephants to fish from. These animals stand still in the river, and are quite accustomed to have fish

caught on all sides of them. The Jummoow Towi joins the Chenab River near a place called Beni-Sing, which is about 13 miles from Sialkot. It is a camping-ground, and supplies are obtainable from a village close by. In the fishing season Mahseer of large size have been caught here. A small fishing boat is very necessary as only large ferry boats are obtainable. Padial about five miles from Beni-Sing, higher up the Jummoow Towi, and a small village called Ban about four miles higher up, are good places for sport when the Jummoow Towi is in good order. A light rod and fine tackle necessary for all places, except Beni-Sing or the water-holes near the Chenab River.

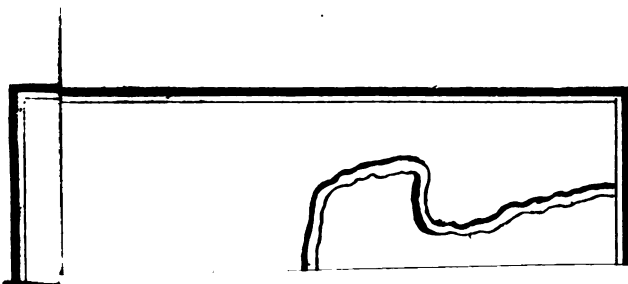
The Nowshera (or Bhimber) Towi.—To fish the Nowshera Towi from Sialkot via Gondul, Amirpur, to Minaor about 30 miles, tents and camp equipage necessary. A parwana from the Maharajah's authorities for coolies, etc., most useful, though not necessary. Light 12-foot rod and fine tackle most necessary as the river is generally very clear. Fish run from 2 lbs. to 16 lbs. The different fishing grounds up the river are:—

Chamb—about three miles from Minaor, and perhaps the best place to start from

<i>Chapral</i> (Somoo)	3½	miles	} A very limited amount of supplies procurable at each place.
<i>Jogwa</i>	6	"	
<i>Sonpa</i>	8	"	
<i>Nal</i>	6	"	
<i>Tank</i>	6	"	
<i>Kar</i>	6	"	
<i>Nowshera</i>	5	"	

In some years when there is much water in the river the march from Jogwa to Sonpa is said to be impassable, and a circular road over the hills has to be undertaken."

General Notes on the above.—The above notes should prove useful to fishermen stationed at Sialkot. Very often confusion arises among sportsmen regarding the two Towi Rivers. The Towi described by Captain Lumsden as the *Nowshera Towi* is also known as the *Bhimber Towi*, regarding which notes are given in this chapter by Captain Mansel. The other Towi, called the *Jummoow Towi*, is a separate and distinct river. As the



Anglers' Map (frontispiece) cannot fully include these two rivers a separate map is herewith given shewing the Cantonment of Sialkot and the rivers adjacent to it.

21.—*Fishing on Rivers Leh, Sohan, Korung and Chiblat, near Rawulpindi, by G. H. LACY, ESQ.,*

The first three rivers are all within five miles of Rawulpindi at their nearest points, and the fishing grounds within eight miles. The Chiblat is at Hassan Abdal, twenty-eight miles from Rawulpindi, but within a two hours' run by rail.

Before going into the details of the fishing in each of the above rivers, I would point out for the information of my readers who do not happen to be members of the Fishing Club, that these are the rivers portions of which the Club has, at much expense and trouble, endeavoured to preserve, and which laudable object has unfortunately up to the present been frustrated by the present uncertain state of the law regarding the rights of the riparian owners, and the inability by Government, under the present circumstance of the law, to lease any portion of the water of these rivers to the Fishing Club or to any individual party tendering for a lease of the same. In order to make the whole matter clear, I will give a brief summary of the action taken by the Club in the matter—and in order to do so, I cannot do better than give my readers an extract of a letter circulated to members on the subject in January 1889:—

“After a lengthy correspondence with the local authorities and Government extending over the last two years, the Committee of the Club find that, at all events for the present, the Fishing Club must relinquish all attempts at preservation of the waters round Rawulpindi. The points of the case are as follows:—On the Club being formed in 1886, the lease of a portion of the rivers round Rawulpindi selected for preservation was held from Government. This lease, after nine months, was cancelled, and the Club was directed to make its own arrangements with the land-owners of the estates traversed by

the streams in question. This was carried out as far as possible, and much good to the fish supply was the result. Last July it was, after much correspondence, officially communicated to the Club that the Punjab Government had finally decided that the water of these streams was Government-property, and on this information a renewal of the old lease was applied for, but it was refused, on the grounds that although the water was the property of the State, yet, at the same time Government did not reserve to itself the right of leasing the fishing in such water to any individual or private party. The Club could, therefore, no longer hope for a lease from Government, nor could they work any longer through the land-owners, who under this ruling could no longer do anything to preserve the streams adjacent to their lands. From the above therefore it will be seen that the Club is now quite powerless, at all events for the present, to attempt any preservation of these waters ; moreover, on the above being known to the professional netters and fishermen, they appealed to the District authorities who could no longer, in the face of Government orders, restrict their fishing, and the result has been that the fish have been ruthlessly destroyed by thousands in the waters that the Club has for the last three years endeavoured to preserve, and watched at so much trouble and expense.

I would, however, point out that in spite of the state of affairs related above, that there are still plenty of fish in these streams, and some very excellent bags have been made since the Club was unfortunately compelled to desist from its attempt at preservation. It is, moreover, hoped that the present stoppage in the action of the Club is only temporary, as a Draft Act treating on, and regulating the whole subject of Indian Fisheries, has been prepared by Mr. H. S. Thomas, the well-known author of the 'Rod in India,' and who is also an Honorary Member of the North Punjab Fishing Club, and which is at present under the consideration of the Government of India. It is believed that if the provisions set forth in the Draft Act can only be brought into force, that the Club will be able to

obtain a renewal of the old lease and all difficulty at preservation will be at an end, and moreover important legislation will be introduced, such as the prohibition of the use of dynamite and poison for the destruction of fish, which will do immense good throughout the country."

I have, however, digressed considerably, and will now return to the details connected with the fishing in each of the above rivers.

1. *The Leh*.—A tributary of the Sohan, which it joins near the Grand Trunk Road Bridge, five miles south of Pindi.

The nearest point on the Leh and where the best fishing is, is within two miles of Cantonments. This is close to the village of Topee, which is situated on an eminence on the right bank of the river. A road runs straight from the jail to this place, along the outskirts of the Park. There are several big pools at this part of the river which hold large fish, comparatively speaking, for so small a river. The convenience of the Leh is that being so close to Cantonments, it can be reached by either riding or driving in 20 minutes or less. The fish are somewhat uncertain on the Leh. At times they take a spoon very freely, and at others nothing can tempt them. They will take *atta* very well also; and good bags are often made with this. The angler must take great care on hooking a fish that he does not cut his trace among the sunken ridges of rock with which the river abounds. I have known no less than ten fish lost in one evening in this manner, when the angler having exhausted his stock of traces, and likewise his temper, went home without a single fish. The biggest fish I have heard of taken in the Leh up to the present was just 10 lbs., and there are doubtless fish of 15 lbs. or more in the larger pools. Scott's No. 2 spoon is perhaps the best for the Leh when spoon fishing, but I have known the fish refuse this kind of spoon and take a hog-backed brass spoon of a broader make, as sold by Mr. T. P. Luscombe of Allahabad.

I have never tried fly in the Leh, but the stream seems suited to its use, and bags would, doubtless, be made by a skilful

fly fisher. The best places for fishing are between A and C on the map of the river issued by the Fishing Club.

There are a vast number of eels in the Leh as also many varieties of bottom fish, which afford excellent sport for the European soldiers of the Cantonment of Rawulpindi, scores of whom may sometimes be seen fishing. The large pool on the Leh known locally as "Narun Calia" holds good fish, and it is quite worth while to bring the Club boat up from the Sohan and troll in it, letting out a line of 20 or 30 yards behind the boat.

2. *The Sohan*.—This river flows within five miles of Rawulpindi. The nearest point is the bridge (Grand Trunk Road), which can be reached by driving, and is about five miles from Cantonments. The Sohan can also be reached by riding out along a path behind the Fort to the village of Moorga. A small spoon, either Scott's No. 2 or one of Luscombe's hog-backed spoons about an inch long, are the best for Sohan. The fish broad will also take a Chilwa well, and sometimes *atta*, and at the commencement of the rains melon seed is a good bait. There are vast quantities of fish in the Sohan besides Mahseer, and one often gets a very miscellaneous bag when bottom fishing. The Mahseer in the Sohan take the spoon best in March and April and in September and October, but they can be caught either with spoon or bottom fishing all the year round except perhaps in January and February.

The best portions of the Sohan for fishing are near the Road Bridge to the Railway Bridge, what is known as the General's Pool, and below Moorga. The Club has now placed two boats on the Koond Pool between the Road and Railway Bridges, and some excellent sport trolling has been obtained. They are in charge of a man named Jumah, of Koond village, and when not in use are kept in his house about two hundred yards from the river. The best bags recorded on the Sohan are as follows:—Three Mahseer of 21, 16 and 6 lbs., and 7 Tingra, making a total of 56 lbs., all on one of Luscombe's spoons, taken by Mr. L. C. Fryer, 45th Sikhs, on April 7th, 1889, trolling from the boat.

Twenty-one Masheer from 1 lb. to 8 lbs. by two members in 1886. There are also recorded instances of two other 16-pounders, one 12-pounder and several 10-pounders. Some of the larger pools certainly hold fish of 30 lbs., and doubtless much larger.

There is also excellent fishing in the Sohan at Chirah, 16 miles from Rawulpindi, where the river leaves the hills. To reach Chirah you go along the Khana road till it crosses the river 16 miles out. There is a good camping-ground at Chirah, about a mile before you come to the river, and to the right of the road. An old Sepoy, named Kaim Khan, of Chirah, can shew the best places for fishing. There is also very fair small game shooting at this place. The Sohan from Chirah to the junction of the Korung, about 16 miles, is seldom fished and affords excellent fishing. The junction of the Ling is a good place, as also a village called Ghira, which you can reach by going out along the Kahuta road. In fact, the portion of the Sohan between Chirah and the junction of the Korung is seldom fished, and a great part is scarcely ever visited by anglers. It would be well worth anyone's while to fish right down from Chirah, or even Koro above Chirah, to Pindi, taking three or four days over the trip. I am sure a good bag would be made. There is also fishing to be got in the Ling, a tributary of the Sohan, which rises near Kahuta.

3. *The River Korung or Rawul.*—This river is a tributary of the Sohan. There are two ways of reaching the Rawul from Pindi: (1.) Either by riding or driving along the Khana road and striking off just before the race-course to the river, or by riding or driving to Topee village on the Leh River, and walking across the hills to the Korung about a mile distant. There are some very large and deep pools on the Korung. The first pool called the "Big Pool," near Pesahowa and Karal, holds very large fish. All down the river are a succession of fine pools, it being hard to say which places are best. At about three miles below Khana, the river contracts to about

20 feet in width and flows between two high precipices, somewhat like the Marble Rocks near Jubbulpore on a small scale, this place is called the "Gorge," on the Club Map of the Korung, and the water here is very deep and must doubtless hold good fish.

Very good bags have, from time to time, been made in the Korung, the biggest fish that I have heard of was 18 lbs. The following bag made in 1885 by Captain Maxwell, Highland Light Infantry, will give an idea of what good fishing can at times be obtained in it :—" March 23rd, 1885, two fish of 11 lbs. and 4 lbs., on the 25th, one of 3 lbs. These three fish taken on a Scott's No. 2 spoon. On March 26th, 21 fish of 32 lbs. on small grilse fly, black ; April 9th, one of 8 lbs. on live-bait ; on April 10th, four fish 8 lbs., $4\frac{1}{2}$ lbs., $3\frac{1}{2}$ lbs. and $1\frac{1}{4}$ lbs. on Scott's No. 2 spoon ; on the 11th, a 3-pounder on Scott's No. 2 spoon ; on the 12th, 12 fish of 17 lbs.; on small grilse fly, black ; on the 13th, three fish of $6\frac{1}{2}$, 5 and 4 lbs. ; on the 14th, one of 4 lbs.; on the 15th, three fish of 6, 4, and 3 lbs.; on the 16th, 11 fish of 26 lbs.; on the 17th, three fish of $5\frac{1}{2}$ and $3\frac{1}{2}$ lbs., all on Scott's No. 2 spoon. Water very thick, never cleared."

From the above it will be seen that the fish in the Korung take the fly greedily. I have also heard of other fish being taken with fly, the biggest 6 lbs. A small black fly, I am informed, is the best.

The Rawul Pool, eight miles along the Murree road, is a first-rate place for fishing, and is full of fish ; I have heard of 90 fish being taken in one day in this pool, but none were over a pound or two. The fish in this pool take *atta* very greedily at times ; at others nothing can tempt them.

The state of the rivers Leh, Sohan and Korung, as also the Chiblat, can generally be obtained on application to the Fishing Club Darogha, Mirza Nabi Beg, resident in the European Infantry Bazaar, Rawalpindi.

4. *The Chiblat*.—This river, which rises near Janiki Sung, and joins the Hurroo about four miles from Hassan Abdal, is one of prettiest little rivers imaginable. Hassan Abdal Railway

Station is only about $\frac{3}{4}$ of a mile from the river. It is 28 miles from Rawulpindi. The river is a succession of runs, and in a few places nice pools which hold fair-sized fish.

There is an excellent dāk bungalow at Hassan Abdal and good camping-grounds, and the trains run conveniently for a day's fishing from Pindi. The Grand Trunk Road and Railway both cross the river about $2\frac{1}{2}$ miles from the railway station. Just below the road bridge is a high bank and deep pool, which is an excellent place and holds good fish. In March 1887, I got one of $10\frac{1}{2}$ lbs. at this place, and there are doubtless larger. The fishing seems to be much the same all up the river, and when on the feed the fish often take really well. About 100 lbs. weight of fish were taken in three days in September 1886, by Colonel Kinsman, R.A., late President of the Club, including a couple of fish turning 8 lbs., and over 100 fish, from 1 to 5 lbs., were taken by an angler lately in a ten days' trip to this river. I have also heard of a bag this year (1889) of five fish from 5 to 19 lbs in one day, by an angler from Nowshera. A fish of 19 lbs. was taken near the road bridge by H. Trevor, Esq., 15th Sikhs, in May 1887.

A small spoon is perhaps the best bait, all gold for preference. The fish will take a Chilwa, as also melon seed, which latter about the month of June is a most deadly bait. The best season are April, May, September and October. Certain native gentlemen, *viz.*, Rais Mahomed Khan, of Wah, and Rais Munir Khan, of Jelloh, who are Honorary Members of the Club, did all in their power to preserve this river for the Club, during the period the Club was permitted to make its own arrangements with the riparian owners, and are, moreover, always most courteous and obliging to anglers and others visiting Hassan Abdal for the purpose of sport.

It is always advisable to take a gun with one when fishing this river, as a couple of duck or three or four couple of snipe can often be picked up along the rushy banks of the Chiblat; and on the Sohan and Korung, a duck or two, with perhaps a couple of "sisi," may be bagged.

22.—*Notes on the Sirun River, by* LIEUTENANT-COLONEL G. JACKSON, *5th Bengal Cavalry,—5th September, 1887.*

(1.) *District Hazara*—"The place to commence fishing is Thapla, 27 miles from Hassan Abdal Railway Station. The Sirun has good pools at short distances from each other. The best way to reach the water is by tonga to Hurripur and drive or ride from the dâk bungalow there to Thapla. Syud Mahomed Hussein of Thapla (Rais) is most civil and obliging, and does everything possible for visitors. Tents can be pitched under some trees and at a well near the river. The Syud will point out the best spots. He is a fisherman himself, and so is his brother. The best time of year to fish is March to May and September to November.

Fish are Mahseer, and heavy fish are frequently taken. The best way to fish is with a spoon fly; much wading can be done with advantage—no boats can be used. Any pool between Thapla and Torbela village can be fished, and one can fish all day except between 10 A.M. and 4 P.M. in May. There are several good pools between Thapla and Sherwan (up-stream). Frogs are a good bait towards the Sherwan water. You can approach Sherwan by a good road from Abbottabad, if you happen to be at that station. A bannia should be taken as it is difficult to obtain supplies between Thapla and Sherwan. At the junction of the Dore and Sirun rivers, below the Syud's house at Thapla, is a good place to begin, and there are eight capital pools between this and Torbela, five miles distant. Unless arrangements are made with the Post Office, letters for Thapla go on to Torbela and are returned from thence, thereby causing delay."

23.—*Notes on fishing near Campbellpur, by* C. T. DOLBY, ESQ.

Place.—About ten miles from Campbellpur Railway station, on the Hurroo river, long reaches of rapids, and heavier pools than on the Poonch. The best way to go is to Campbellpur Railway station. The distance of the fishing is about six

miles to the right of the station. On the way to the fishing ground, you cross some small springs known as "Dhobie Ghat," as well as several others, where, as far as I can remember, some gold diggings in the bed of the stream are carried out by natives. The road or pathway leading on to the river bank is fair in some parts. I do not remember the name of the village opposite the bank from where I was fishing, but it can be noticed as being rather a larger one than the ordinary run of villages in the locality. There is no house accommodation, but there are good sites for tents directly on the banks and sheltered by trees. I was out at this place during the month of September and found the water quite clear. March and April ought to be good months. The fish are Mahseer, Rohu, and Trout. Once at this place, in a couple of hours, I got a Mahseer weighing 8 lbs. and several smaller ones. I was told that fish up to 60 and 70 lbs. can be got at this place, and I am in favor of this information, as the junction of this river with the Indus is but a few miles off, and large fish must naturally inhabit these pools. I am certain that if, in any way, netting could be prevented on this river, either by the assistance of the Tehsildar, or Lumbardars themselves, that it would afford better sport than the Poonch, and, moreover, the distance from the nearest railway station is nearer than Tangrôt. I have also fished from the junction of the Chiblat with this river to about two miles below the Trunk Road Bridge, but have had no luck, although last year Mr. McDermott and Mr. Crux caught a few on the 24th May (1886), the largest one being 8 lbs.

The junction of this river with the Indus is known as Choor, and I think this name is noted on some of the maps of the Rawulpindi District.

I have not visited this place, but have heard of its being a good fishing ground. I hear that there is a dâk bungalow there, or some sort of resting-place for travellers on the way to Kohat; boats are, I believe, available at this place, but I am afraid that the River Indus is too rough for boating.

On the left of Campbellpur station, there are also some

large pools, the distance being two or three miles. On one occasion I saw a splendid Rohu netted, which could not have been less than 15 lbs. The river is wadeable here, and I fished from the bank with dough and Chilwa, and found the fish taking. I used ordinary double casts and treble hooks, and took fish at about 4 P.M.

There is also good fishing on the Indus at the junction of the Loonda or Cabul river ; the junction is facing directly opposite the dāk bungalow, the distance being $1\frac{1}{2}$ miles.

On the 23rd March 1883, at about 1 P.M., I took four Salmon-Trout, or what are locally known as Pooa, weighing 15, 12, 9, and 7 lbs., all taken with Chilwa.

The difficulty I have experienced at this place is that it is hard to obtain small fish for bait, although at times shoals can be seen passing up-stream close to the banks, and they can be switched out by dozens with a small triangular net on a stick three feet long. To avoid disappointment, it would be as well to take a supply from Pindi, caught in the Leh. I have observed that when a dash is made among them by large fish when going up-stream, they all disperse for a few minutes, and then come back to their places, and continue their march up-stream. When these fish are travelling up during the months of March and April, I am told that it is a sure sign that the large fish are following them. The first junction of this river with the Loonda is also a noted place for fishing, and is called Koond ; this is above Khyrabad Railway station and adjacent to the Trunk Road, and about three miles distance from that station. A friend of mine, Mr. Garstin, caught a Mahseer at this place weighing 39lbs.

When out fishing one afternoon, at the junction opposite the dāk bungalow at Attock, I noticed a gentleman attached to the Garrison of Fort Attock and a well-known angler, who took nine fish, the largest being about 30 lbs. He was fishing between the junction and the triangular sand bed ; for convenience of crossing over he had a small punt, which was always kept on the bank.

24.—*Notes on fishing (1) at Abazai, Swat River, near Peshawur ; (2) at Jummo, and (3) at Kohala, by F. J. H. BARTON, Esq., The Queen's Own Corps of Guides.*

“Fort Abazai is built on the Swat River, just where it leaves the hills. It is about 28 miles from Peshawur, and something over 30 miles from Nowshera, and both roads are good. There is also an excellent road from Nowshera, *via* Mardan, from which place it is 30 miles distant. There are officers' quarters in the Fort, and also a canal bungalow.

In the very cold weather, *i.e.*, November to March, the Masheer seem to disappear from Abazai and go down to the junction of the Swat and Cabul Rivers at Nisutha, where the Abazai boatmen say there is fishing all through the winter, the water of the Swat above the junction being beautifully clear at that time of the year. Nisutha is about 16 miles from Peshawur, and the same distance from Nowshera.

Although the Masheer seem to leave Abazai during the coldest time of the year, there are plenty of what are, I think, generally called Snow-Trout, or Himalayan Trout. Mr. Dolby in the first edition of the Anglers' Handbook refers to them at Attock as Pooa. There are also quantities of Labeos of some sort, Rohu, I think, to be seen feeding along the edges of the rocks, occasionally showing a broad silver side as they turn. Some skilful Angler may know a way of capturing them, but I have failed, the finest tackle and various baits were unsuccessful.

It is during the hot weather, from April to September, that the Masheer are to be caught at Abazai ; there are plenty of them, and big ones, though the water being nearly always discolored, they have to be caught with natural baits and *atta*.

The biggest I killed there was 35 lbs., on *atta* ; the next 30 lbs. ; on live frog, several over 20 lbs. and many fish between 20 lbs. and $\frac{1}{2}$ lbs. with *atta* and frog, though 9 lbs. was the smallest I caught on frog. Early in September 1887, I was at Abazai for two days, and killed four Masheer, 22, 15, 12,

and 11 lbs. respectively and two Wallago attu, 11 and 9 lbs., all with live frog; water discolored but not thick. After that I went to England, and only came out in April 1889. My first visit to Abazai, after my return, 15th May, 1889, I killed two Masheer, 30 and 14½ lbs. respectively, using live frog in thick snow water.

The best places to fish with live frog are inside the out-works of the Fort, there are several piers of loose boulders to prevent the floods undermining the buildings; between these piers are capital backwaters and eddies.

With *atta* I was always most successful just below the Fort, where the water is rather shallow, flowing over a boulder bed. A spare rod with a paternoster baited with worms will always supply some butchwas, which are excellent eating, and an occasional Snow-trout or Wall ago attu. I havenever known a Mahseer over a pound take a worm. My method of fishing at Abazai with live frog is as follows:—Three or four feet of stout salmon gut, a No. 1 Limerick hook (the bronzed turned-down-eyed Pennell hooks are a splendid pattern); an ounce or so of lead tied on with thread about 2½ feet above the hook, so that if the lead gets hung up on the bottom you lose nothing else, a long line and a stiffish rod. For bait fishing I always use a short stiff top with my fly rod. Pass the hook through the fore arm of the frog close to the body, entering the point from below. Throw out down stream just in the edge of the main current, and when you feel that your lead rests on the bottom, hold taut and wait for the Mahseer.

Atta, colored a bright yellow with turmeric (*Huldee*) and worked up to a stiff paste is a good bait for Mahseer in discolored water. An excellent method of baiting it, a dodge I learnt from the Goorkhas, is to make a roll of the paste about the thickness of a slate pencil, and put it on so as to follow the bend, the baited hook resembling a fat grub. You seldom miss a fish when your hook is baited in this way, as the point strikes clear and free in a moment. An artificial bait I have found very effective is Hearder's plano-convex minnow a sort of silver

spoon spinning on an axis of brass wire, to the extremity of which are attached two trebles, one below the other.

(2.) *Fishing at Jummoo.*—In the first edition of the Handbook there is no mention of fishing at Jummoo. Through the kindness of Sir M. Biddulph, I was twice enabled to fish there. On the first occasion we went straight to Jummoo and fished there for three days, getting good sport on light tackle, the biggest being about 12 lbs. On a subsequent occasion we marched up the Chenab and fished the Towi from the Junction to the city, but though the water was all that could be desired, we only got a few small fish until we reached the bridge,—a result owing, we afterwards found out, to the awful poaching by natives.

The Towi at Jummoo is preserved by the authorities, or at any rate no netting appears to be allowed between the Panchakkies above the palace and the bridge-of-boats below the city. Above or below these limits fishing was worthless. The fish take a fly well. I killed nine fish from 2 lbs. up to 8 lbs. in an hour on a ten-foot rod with a small salmon fly, but I fancy a flying spoon, a bait I did not know of then, would be the best bait for Jummoo Mahseer.

(3.) *Fishing at Kohala.*—It may be of use to travellers bound for Kashmir to know that there are big Mahseer to be caught where a small stream joins the Jhelum flowing under a suspension bridge about a mile before you come to Kohala. I went down from Murree in July one year and fished for a day with *atta* and caught Masheer 5 lbs. and 3 lbs., and several Snow-trout, and lost three big Mahseer, one of which jumping out of the water showed himself to be 20 lbs. at least; I had only a small trout rod, quite unfitted to cope with such monsters in heavy water. If I am ever at Murree I mean to try there again.

The three great tips in all fishing I find are—(1) To fish as fine as you can, (2) Have standing rings on every rod, even a little one of 9 feet, (3) Always, no matter how fine you fish, and how small fish you expect to get, have a long line.

N. B.—From the Ordnance Map there are two small streams flowing into the Jhelum. The one described above is evidently the Kanair *nadi*, which takes all the drainage on the east side of the Gullies range running almost due north from Murree to Kalabagh, and is about 20 miles in length from source to its junc-

tion with the Jhelum. Another small stream, the Bakat, joins the Jhelum about three miles north of Kohala.

25.—Torbela on the Indus—Hazara District—Notes by GENERAL DANDRIDGE, late Commanding Peshawar District.

(1.) *To reach Torbela*—By rail to Hassan Abdal, thence by tonga or ekka to Hurripur dāk bungalow, thence by tonga or ekka to Thaplah close to the Sirun, then either fish down to Torbela, ride or walk. The *khansama* at Hurripur keeps ponies and ekkas. Hassan Abdal Railway station is 28 miles from Rawalpindi, and Torbela is about 30 miles from Hassan Abdal.

(2.) *Bungalow accommodation and how procurable*.—There is a small bungalow belonging to the Salt Revenue Department, for use of which application should be made to the Executive Officer at Ghari, *viâ* Lawrencepur and Husroo. There is but one room in the bungalow, dressing-room and bath-room. No servants.

(3.) *Arrangements for boats*.—The Thanidar at Torbela will get a boat from Hubbul (or Kubbul) on the other bank of the Indus. The boatmen are very troublesome and independent, and will not turn out before 10 A.M., so that the morning fishing is lost.

(4.) *Shikaries, &c.*—As a rule the fishing is only from one spot, and only for one rod, unless the Indus is very clear. No attendant fisherman is necessary, but there are a lot of local fishermen if one should be required.

(5.) *General Notes*.—Fish seem to be on the move at all seasons, but fishing depends on the state of the Sirun. If it is dirty you cannot fish at all. Medium size all-silver spoons for choice and wire traces are recommended. The best place to fish is just where the Sirun joins the Indus. If the Indus is very clear, you can trail a spoon from a boat in the same manner as at Tangrôt, but the boatmen will not tow the boat, and separate coolies are necessary. The boats are large, clumsy ferry-boats, and quite unadapted for fishing. The only two men at Torbela who can in any way assist the angler, with reference to landing fish, etc., are named Heera and Fuzl. It is advisable to write to the Deputy Commissioner regarding supplies, as these are not very readily procured. The “Kalabanse” will also take a spoon at Torbela in addition to the Mahseer, and run up to 15 lbs. or so.

*The following is a Diary of a fishing trip to Torbela by
GENERAL DANDRIDGE, in January, 1887 :—*

"Arrived at Torbela on 23rd December, 1886, but had to wait until 3rd January, 1887, for the water to clear.

Date.	Weight.	Piscæ caught.	How caught.	REMARKS.
3rd January, 1887	{ 34 lbs. 12 " 8 "	At Torbela at Junction of Sirun	All caught on a medium-sized all-silver spoon.	
4th " "	{ Nil. 32 lbs. 28 "	Nil. At Junction of Sirun.		
5th " "	{ 9 " 7 "	Do. Do.		
6th " "	{ 24 " 21 " 38 "	Do. Do. Do.		
7th " "	{ 25 " 30 "	Do. Do.		
8th " "	Did not fish		Rain came on, but fished all through it.
9th " "	{ 40 lbs. 38 " 32 " 10 " 7 "	Do. Do. Do. Do. Do.		
10th " "	{ 10 " 10 " Nil.	Do. Do.		
11th " "	{ 45 lbs.	Do.		Heavy rain, flooded and muddy.
12th & 13th "	Did not fish		
14th " "	{ 15 lbs.	Do.		
15th & 16th "	{ 14 " 11 "	Do. Do.		
17th " "	{ Nil. 20 lbs. 16 " 15 " 14 " 12 "	Nil. Do. Do. Do. Do. Do.		
18th " "				
19th " "				

Total bag made in thirteen days, actual fishing, 577 lbs.; the average daily catch being 44 lbs., and the average weight of fish caught being over 20 lbs."

From the above account, it will be seen what splendid fishing is obtainable at Torbela even in the cold weather, and two anglers, some four years ago, took 900 lbs. weight of fish in ten

days. From all accounts, however, Torbela seems a very disappointing place, and many anglers go there and come away without a bag; but this is the case with all the rivers in India.

N. B.—The above account is given as published in the 1st edition. Since the above catch made by General Dandridge, I have scarcely heard of any fish being taken at Torbela at all. The Sirun River near Torbela is fearfully poached, the fish being destroyed ruthlessly by nets, poison, and dynamite. One of the great difficulties to contend with at Torbela is the want of boats; but at present the Fishing Club have an excellent boat, presented by G Lucas Kemp, Esq., Secretary, Universal Life Assurance Company, which any member can take to Torbela temporarily, provided he pays all expenses.

26.—*Notes on fishing in the Hurroo River, compiled from various sources.*

The Hurroo River rises south of Murree, and flows in a south-westerly direction till it joins the Indus, below Campbellpur. Above the junction of the Chiblat, there is practically no fishing, the river being at the fishing season, merely a wide stony bed with scarcely a trickle of water in it. Below the junction of the Chiblat there are some excellent runs, and good fish have been taken. The best bait to use is a small spoon, under $1\frac{1}{2}$ inches in length, silver and gold. The fish will also take Chilwa at times very freely. It is believed that the portion of the river below the junction of the Chiblat is the best on the whole river. Lower down, near Campbellpur, fish are taken, and I have heard of one 15 lbs. being caught in this locality. All down the river netting is freely carried on; in fact it is one of the worst poached rivers in India, and in those portions near the railway I have heard of dynamite being used. If it was not for this, it would be a splendid river. The best way to reach the Hurroo is to go to Hassan Abdal railway station, and it is distant about three miles from this. Both Burhan and Lawrencepur railway stations are close to the Hurroo, but whether there is much fishing in this portion of the river I am unable to tell. I have been told by natives that at the junction of the Nandna River with the Hurroo, due south of Campbellpur, is a good spot.

In all probability, the junction with the Indus would afford good fishing, if only properly tried, for which a boat would be necessary. There is no reason why there should not be magnificent fishing at this place, as at Torbela or Tangrôt, which are both at junctions of rivers, as if the temperature of the main river is colder than the tributary, the fish invariably leave the colder water and run up into the junction of the tributary stream.

27.—*Notes on fishing near Wazirabad, in the Chenab River, Gujranwala District, by W. J. CRUX, ESQ., Alliance Bank of Simla.*

“District Gujranwala, nearest railway station, Wazirabad, two miles, from Katala one mile. River Chenab with back-waters (always netted). Best way to reach the water in an *ekka* which can be procured at Wazirabad only. Dâk bungalow at Wazirabad; any amount of places for tents on riverside. Best time of year to visit the water—March, April, May, September and October. Fish—Mahseer and Rohu, the latter have been caught up to 20 lbs., former up to 40 lbs. Best way to fish—with worm and paste (*atta*). Fish off the bank, but a boat can be used, if preferable. Use ordinary single, or if preferred treble gut. Water is generally of a brown color. Early morning is the best for Mahseer. From 11 A.M. to 4 P.M. for Rohu.”

N. B.—The above particulars may be found useful to some on the line of march when they may happen to be halted for a day or two at Wazirabad. The fishing itself is scarcely good enough to make it worth while for any one to make a special trip to Wazirabad solely for the purpose of fishing, but I believe the fish take fairly well when on the feed, and as shown above they run to a considerable size.

28.—*Notes on fishing in the Beas, River Hoshiarpur and Kangra Districts, by H. S. DUNSFORD, ESQ., District Superintendent of Police, Rohtak.*

“District—Hoshiarpur or Kangra, the river forms the boundary between the two districts; Jullunder is the nearest

Railway Station, and is 24 miles from Hoshiarpur which is reached by dâk gharri. From Hoshiarpur to Dera Gopipur on the river is probably 45 miles, and can be reached by dooly or pony dâk, and from this place the best places on the river can be reached by walking. There is a dâk bungalow with khansama, crockery, and supplies on the Kangra side of the river, just above the river. There is a small bungalow on the Hoshiarpur side with furniture but no crockery or servants. The best time of year to visit the water is in March and April in the spring; and in October and the first-half of November in the autumn. Towards the end of April, snow water commences to come down, but fishing can be got up to the middle of May. The fish are Mahseer, and run from 4 or 5 lbs. up to any size. Fish up to 60 lbs. have been caught.

The best way to fish is with spoon or large phantom. A boat is necessary to make the most of the water, but unless one possesses a Berthon boat or a private one, these are not as a rule obtainable, but a substitute can be got, and in fact is even better than a boat almost, in the shape of a charpoy fastened to inflated hides, called locally *draie*. These require two men to work them, and the same men can carry them about when required, as being so light they are quite portable, and in this lies their advantage over a boat, unless a very light one.

I only tried spoons of very coarse make. I think spoons of three to four inches in length for the heavy water and about two and a half inches in the lighter water would be necessary. The water is generally heavy and lots of it, and light fly spoons for small fish would be no good. A tributary of the Beas at Harripur gives some nice fishing on a smaller scale. There is a police bungalow just above the river. A *draie* will take you up the sluggish stream for half a mile or so, where there are some nice runs holding very clean and game fish up to 6 or 7 lbs., which take a small spoon freely. I found in this clear water that a spoon merely *kalaied* on the concave surface, and of a bronze colour on the convex side, was all that was required. Dera Gopipur to Ranithal is a ride of some 12 or 14 miles. There

is a bungalow at Ranithal, but no attendance or servants, but crockery and cutlery are kept, as also at Harripur.

The best places at Dera Gopipur are the Panchakkies about a mile down stream, and a run about a mile up stream where the cliff comes down to the water's edge, and a projecting rock gives a nice standpoint for throwing into the run. This is on the Hoshiarpur side of the river."

N. B.—The above notes only refer to a very small portion of the river Beas, but they are sufficient to put the angler on the river at a good spot, from which he himself can easily find out the best places. It is believed the Beas is fishable for many miles, probably fifty or sixty, if not more. It is a splendid river little fished, and the fish run to any size and are very bold and fearless. A detailed account of the fishing all down the river would be very interesting.

29.—*Fishing near Rajanpur*, by CAPTAIN G. B. UNWIN,
1st Punjab Cavalry.

"I have just returned from a trip up the Kaha pass, through which a river of the same name flows, rising somewhere in Biluchistan above Kingri. This stream runs into the plains about six miles from Harrand, one of our frontier posts some 36 miles from here, and loses itself in irrigation a few miles from the mouth of the pass. I went out first in April 1887 and had indifferent sport, the water being colored; I went again on December 4th, 1888 and in three days got 17 Mahseer weighing 38 lbs., largest 9 lbs., all of which, except three small ones, took a salmon fly, the Silver Doctor, Blue Doctor, and a fancy fly I used in Norway last August, with a lot of tinsel in it being the best. I went again on the 28th December, 1888, and had 23 fish in three days, all but four taken on fly. This last time the average was about $2\frac{1}{2}$ lbs. largest 5 lbs. I also lost seven fish which got off, one of which was about 12 lbs. or looked it, as he leaped out of the water. Five of those lost were hooked with spoon-fly, and only two with fly. My idea is that the so-called Mahseer Flies are a fraud, not being bright enough in the wing, and that gaudy salmon flies, such as the Silver Doctor, Blue Doctor, Jock Scott, etc., are the most killing. I got more fish out of each small pool with the fly than

I could have with the spoon-fly, as the latter disturbs the water so much more.

All the fish I caught with fly took it after I had worked it a little while, as according to my limited experience, is generally the way with salmon, and in only one case did a fish take the fly directly it fell into the water.

My chief object in giving you the above account is to give you an instance of fish taking well in winter, as the popular idea seems to be that they do not take well in the cold weather. I think also a fish hooked with fly plays much stronger than when he has half-a-dozen punishing treble hooks imbedded in his jaws. Several of the fish I caught played as strong as any grilse I have caught of the same size, except that they jumped less often. They were all in fair condition. I found that I lost a lot of fish from using small treble hooks on a spoon-fly, which I think are much more likely to lose hold than one good sized single hook of a fly, say one inch and a quarter in length. The flies I used were from 1 to $1\frac{1}{2}$ inches in length. The water was very clear, and I had to fish up stream in all the still places."

30.—*Notes on fishing at Rupar, by* MAJOR-GENERAL
C. S. LANE.

"There is capital fishing at Rupar; the best time to go there is early in March, say from the 10th to the 20th. The fish are well on at that time before the snow water comes down the Sutlej. Fish just outside the stream made by the doors when opened, and below it, right down to the point where Bishop Heber's tree stands, indeed all over the water from there right up to the Bridge, or Regulator. A boat is absolutely necessary, but Mr. John May will always lend you one of the canal boats. He is most obliging to all who go to Rupar for fishing, and has often helped me much. He is a fisherman himself. The fish are plentiful and run up to 18 or 20 lbs., possibly even heavier than this, but I have myself not caught many above that weight. They take a small natural bait, blue

and white phantom, Devon Bait, or Silver spoon 1 to 1½ inches. Any of these they will take freely; the small Chilwa the best of all. The best way to get to Rupar is to get out at Sirhind, and go on in an *ekka*, or you can go from Durroha Junction from which it is about 18 miles. From Sirhind it may be 40 miles or more. It is on the North-Western Railway. There is a bungalow which travellers can use, but no servants. Rupar is a favorite place of mine for 10 days or so in March."

31.—*Notes on fishing at Okhla Weir, near Delhi, by H. S. DUNSFORD, ESQ., District Superintendent of Police, Rohtak.*

"*District Delhi.*—About nine miles from Delhi, on the Muttra road, a pukka road all the way. Fishing in the River Jumna. The best place for fishing is just below the sluices which regulate the supply of the Agra canal. The canal is no good for fishing, but the river holds all sorts of fish. The fishing ground can be reached by driving—any hotel-keeper at Delhi will supply a gharri, which can drive up within a hundred yards of the fishing. There are two bungalows. For one, ask permission from Executive Engineer, Western Jumna Canal, Delhi; for the other, ask Executive Engineer, Agra Canal, Muttra. If a prolonged stay is intended, or even for one night, it is advisable to get permission, as the place is often visited by sight-seers or anglers from Delhi, and it is as well to make sure of a room. Too hot for tents at the fishing time of the year. Best time, April, May and June up to the time the water gets fouled by the rains, also October and up to 10th November. The fish are Mahseer, fairly plentiful, oftener over than under 20 lbs. Best baits, spoon (silver and gold) from high banks, by throwing into the heavy water at foot of slope from weir for Mahseer; other fish are taken in the pool lower down and occasionally Mahseer. Wire or treble gut traces are best, as the Mahseer run up to 40 lbs. and are generally over 15 lbs. Water clear from April till rains, and very slightly affected by snow water, which renders the same river almost unfishable from the middle of May at Dadupur. The amount of water going through depends entirely on the requirements of the

Agra Canal just above the weir. When a strong rush of clear water is going down, Mahseer may be expected at the very head of the heavy water, but Goonch are also troublesome then. Mr. Kirkpatrick, of Delhi, killed one of 136 lbs. on a rod and line a few years ago, but the general result of hooking a big one is loss of tackle, time, and temper. In fact, I always *force* him to keep moving, and if he is too big to lift, when he sulks in mid-stream I take a dead pull at him and break loose without further waste of time. If the water is a little colored, a blue and white phantom is often killing, but do not buy anything of the kind from Habibulla, the Delhi tackle seller; all his spoons and phantoms are mounted with hooks which are utterly useless, though they look good enough for anything. He sometimes has good treble gut traces.

If the water is low and almost still, the pool at the foot of the run holds heaps of coarse fish, such as Mohi, Murrail, Mulleys, etc., which take a live or dead bait very freely, a single hook with long shank put through the nose, and moved slowly about, either with or without a float, is *the* tip. It does not matter how small the bait is or how big the hook. Fish up to 20 lbs. are taken in this way. The hook should be on strong single gut. There is also the bare possibility of a Mahseer taking this. Bait are available in any quantity, and can be caught in a cloth under the weir. Fishing above the weir or in the canal itself is generally waste of time.

Supplies are not easily obtained. If a stay of a day or two is intended, take meat, fowls, bread, vegetables, etc., from Delhi. Mr. Dennehy, Overseer, Agra Canal, lives at Okhla, and is most kind and obliging to visitors, and can often lend a boat. This is sometimes useful at the foot of the run in the head of the pool. The boat is held in position by a long rope held by coolies on the roadway across the weir. Butchwas are sometimes on the take and run up to 3 lbs. I took six dozen one day in June on minnow and fly, the latter for choice, as they get unhooked less; a dark or red fly is best. It is important to remember that the canal is closed every year for about ten days, generally from 10th

to 20th of April, and the river is then unfishable owing to the silt carried down by the rush of water. The exact time could be ascertained by a line to P. Dennehy, Esq., Agra Canal, Okhla, *via* Delhi. Take your own crockery, cutlery and tub. These could all be got at Delhi. There is a fish locally called Pariasni, which runs up to 20 lbs. or more, which is sometimes on the take. It takes live-bait, fly and dead-bait, spinning. It fights well and is excellent eating. Best time of day to fish, from day-light to 10 A.M. and from 4 P.M. to dusk, especially the latter."

[There is fishing to be done at the Jumna bridge—head of Canal escape, three miles from Delhi.]

32.—*The Giri River.*

We reprint *in extenso* the Handbook of the Sirmoor Fishing Club with map, by kind permission of Colonel Deane, the Honorary Secretary. The preservation of rivers in India is so important, that every encouragement should be given to a Club of that kind. Every fisherman in India should feel it a species of duty to subscribe his gold mohur every year. It is to be hoped that other Fishing Clubs will follow in the wake of this one.

Map No. 48 of the Trigonometrical Survey contains the course of the Giri.

HANDBOOK OF THE SIRMOOR FISHING CLUB.

Description of the River.—The course of the river Giri from Kharganoo, to the Jumna, is shown in the plan attached to this work. This is the portion of the river in which the best fishing is to be found, but the river has its origin a long way from Kharganoo in the direction of the Baghi range. Baghi is on the Hindustan and Thibet road, five marches beyond Simla. In its course to the Jumna, the Giri passes within ten miles of Fagoo, one march from Simla, where there is a Dâk Bungalow. Lower down, it passes the village of Kharganoo, which is about ten miles from Solon, where there is also a Dâk Bungalow. Solon is half-way between Kalka and Simla, on the cart road which connects those places. From Kharganoo to the

Jumna, the Giri lies wholly in the territory of the Maharajah of Sirmoor, and it falls into the Jumna close to the ferry at Rampore Mundi, or Rajghat. The Giri varies considerably in size at different seasons of the year. During the rains it is of considerable volume, and, owing to the rapidity of the current, it is quite unfordable, but in the spring and autumn, it is easily forded in many places. Its breadth is generally between 40 and 80 yards, and it lies between well-defined banks. The river contains numerous pools and rapid streams, and it runs through mountains, where the fisherman will find no ground for complaint on the score of uninteresting scenery. The Giri does not spring from the perpetual snows, and there need be no fear that, as the heat increases, the river will be rendered un-fishable by snow-water, but in exceptional seasons, it is liable to be coloured, at times, by snow-water from the lower ranges. Thus, if there is a heavy fall of snow in the end of winter; the water may not clear sufficiently for fishing till May, or even later. This state of things is however exceptional, and the river is generally in order for fishing both in the autumn, and the spring, October and April. Heavy showers are liable at any time to affect the water, both in colour and volume, but the river soon clears, and is again fit for fishing. If the rains have been late, and heavy, the volume of water in the autumn is considerable, and the river is at times difficult to ford, particularly in the lower reaches. Its condition is the same when a heavy fall of snow is melting from the hills near its source. At such times, a Berthon boat, or an elephant, will be found useful. An elephant can be taken from Rajghat as far up the river as Seon, four short marches from Kharganoo, but the road is not a good one, and generally lies in the bed of the river. A pony can be taken along the Giri from Kharganoo to Rajghat, but the road is not good, and the animal must, occasionally, follow paths across the hills."

Approach to the Giri.—The best way of getting to the Giri depends on the direction from which it is to be approached. If from the Jumna, a start must be made from Saharanpur *via* the

Chakrata road. Saharanpur to Badshai-Bagh, by the Chakrata road, is 28 miles. There is a road bungalow at Badshai-Bagh, to the right of the road on a small hill. It contains several furnished rooms, but the traveller has to make his own arrangements for food. From Badshai-Bagh to the bridge over the Asan river, is about twelve miles—the first six, up a slight incline to the Timli Pass, and then down hill to the Asan. The road from Saharanpur to the Asan is very good the whole way. The road bungalow at the Asan is about a quarter of a mile beyond the bridge. The house is furnished, but there is no arrangement for food, and permission of the Executive Engineer, Chakrata Division, Military Works Department, must be obtained to occupy either the bungalow at Badshai-Bagh, or that at the Asan. From the latter bungalow, to the ferry over the Jumna, the route is along the right bank of the Asan for about five miles. From the ferry to the Giri mouth is about two miles along the bank of the Jumna. By cutting off the angle, a path, about three miles long, will take the fisherman to a point higher up the Giri, where the fishing is better. The Giri splits into branches from the Jumna up to Sattawan, about nine miles from the mouth, which is the usual camping-ground. From thence onward, it is generally one stream. At some times of the year, particularly in the spring, the fishing in the smaller branches from Sattawan to the Jumna, is good, but in the autumn, it cannot be depended upon as there is a good deal of "scour," and the fish do not appear to lie there. *Ekkas* can always be obtained in Shaharanpur for the journey to the ferry at Rajghat, and *dāk* gharries can be engaged by special arrangement. From Umballa the Giri can be reached at Sattibagh, *via* Nahan. Sattibagh is about the centre of the fishing ground, and often affords the best fishing. A Dooli-Dāk can be provided from either Nahan or Umballa, by giving two days' warning to the Tehsildars of those stations—the journey occupies about 14 hours, being about 50 miles. The Giri at Sattibagh, is 18 miles distant from Nahan, road good but stony. The march is best done in two days, unless a change of coolies can be

arranged half way, as the entire march cannot be done by the same men. The Tehsildar at Nahan provides coolies for the march. There is a good dāk bungalow at Nahan, and shops where English supplies can be obtained; also a Postal and Telegraph office. The best place to make for on the Giri from the stations of Simla, Jutogh, Sabathu, Dugshai, Solon, or Kasauli, is Kharganoo, a village about ten miles from Solon—the easiest way to reach the river is to go by the cart road from the Solon Dāk Bungalow to the Shalogra Tonga stage, four miles towards Simla, and then to go down the path-way to the bed of the Simla stream, and follow the stream until the Giri is reached. There is also a direct path from Solon to the Giri at Kharganoo, the latter portion of which also lies in the Simla stream. Ponies can be taken by both routes, but the way *viâ* Shalogra is the best for riding. The Giri can be crossed close to the junction of the Simla stream, and the best place to camp is the high ground above the left bank of the river; this spot is always dry, but there is no shade. Kharganoo can also be reached from Simla by marching along the bed of the Simla stream—the distance is about 22 miles. There is a mule track, but no road. A pony can be taken, but the going is not good, as the river bed is very stony, and has often to be crossed. A path can also be found from Dugshai to the Giri at Anoo, and three or four marches across the hills will take the traveller from Solon to Sattibagh, while two marches will take him from Solon to Newar. It is necessary to have arrangements made for the supply of coolies and transport before entering the territory of the Maharaja of Sirmoor. A perwanna from the Maharaja will at all times be sufficient, but members of the Sirmoor Club are recommended to address the Honorary Secretary to the Club on the subject."

Route along the River and Camp Equipment.—There are no bungalows at present along the Giri, and the fisherman must take tents with him. Arrangements are, however, in progress for the construction of a bungalow at Kharganoo. The camping-grounds between Kharganoo and the Jumna are shown on the

accompanying plan. They are selected with reference to convenience for the supply of coolies and provisions from adjacent villages, but in most instances the villages are not close to the river. A pony can be generally taken along the whole route, but if the fords be difficult, in consequence of rain, or melting snow, it will be necessary to swim the river in some places. In a dry season, it can be easily waded at the shallows. The river has generally to be forded several times on each march. The fords are well known to the coolies and villagers. In the rains, the river is crossed on mussacks or gourds. The usual camping-grounds are as follows :—

No. of Marches.	Names of halting places.	Estimated distance in miles.	REMARKS.
1	Simla to Kharganoo ...	22	Camp on high ground above stream (Double march)
2	Majere ...	5	Camp by river.
3	Newar ...	6	Do. Village two miles off.
4	Anoo ...	4½	Do. Village distant on Hill.
5	Seoon ...	5	Do. Nice shady camping ground, village close by.
6	Mythoo ...	6	Camp by bed of river, village above.
7	Sattibagh ...	4	Shady camp close to river, Ranka Lake opposite Post office, and Thasil.
8	Myuth ...	3	Camp close to river and village.
9	Korilla ...	5	Camp close to river and village near.
10	Koona ...	3	Camp above river do.
11	Mandal ...	3	Camp on high ground above river, shady place.
12	Sattawan ...	3	Camp by side of river. Village above, about a mile off.
13	Goorkowalla ...	5	Shady camping ground, village adjacent.
14	Rajghat ...	6	Camp by Ferry boat, village close by.
TOTAL Rs. ...		8c½	

NOTE — The rate for coolies is 4 annas and 6 pies per stage.

If detained for a day 4 annas per coolie detention allowance must be paid.

The camping grounds being mostly by the river are low, and therefore not very healthy until the rains have well cleared off, and the ground has had time to dry. In the spring, the valley of the Giri appears to be absolutely free from malaria. There are very few roads between the encampments. As a rule,

the course of the river has to be followed and occasionally there is a mule track or small pathway through the jungle, of which there is a good deal in parts, particularly between Rajghat and Sattawan, and thence to Mandal. Above Koonā, the valley opens out, and there is less undergrowth until Seon is reached. The river rises a good deal between Sattawan, and Koonā. From Koonā to Sattibagh the rise is very gradual, this portion being almost a plateau. The rise is again gradual between Sattibagh and Anoo, but there are some fine pools and runs between these places. From Anoo to Newar, the river again rises a good deal, and the falls are rapid. Between Newar and Majere the usual route is across the hills, leaving the river for some miles of its course, but if the water be not too heavy for fording, the bed of the river can be followed the whole way. In this portion of the stream there are some fine pools, but the valley is narrow, and the river deep. Mules can generally be taken throughout the whole route but, on the whole, coolies are best, particularly for the crossings. The lighter the men are laden, the better the marches can be done. The usual rate of payment is 4 annas for a short march, and 5 to 6 annas for longer ones. If a double march be done, fresh coolies are generally necessary, although sometimes the one lot of coolies will do a double stage for double pay. It is essential that the tents should be small and the whole camp equipment should be as light as possible. The best tents are the Kabul pattern, 80 or 120 lbs., with a few small Pals, for servants. The supplies obtainable are, usually, only sheep, milk, rice, ghee, *atta*, &c. The traveller must carry all necessary stores with him. No vegetables or fruit are to be had, and bread and soda water, if required, must be taken. Bread and soda water can generally be obtained from Nahan 18 miles distant from Sattibagh. If ponies be taken on the march, a spare set of shoes and nails is requisite, as there is no forge *en-route*. Travellers are strongly recommended to treat the coolies, and the Maharajah's people, with liberality and consideration. The inhabitants will be found to be civil and obliging, and it is essential to the suc-

cess and continuance, of the Club, that they should not be unnecessarily harassed.

Fishing Season.—It is possible that a good many fish lie in the lower portion of the Giri all the year, but, as a rule, the fish run up from the Jumna about March, and fall back in October, and the best times to fish the Giri are in the spring, and the autumn. Good fishing is obtainable at any time during the rains, when the water clears sufficiently; at such times even the small tributaries would afford sport. The time at which fishing begins in the spring depends on the date on which the fish begin to run up. This date, no doubt, varies somewhat in different years, and it is probably earlier in a dry year when the water in the Giri must be warmer, than it is in a wet year. It is known, as a fact, that the river as high up as Kharganoo, contains fish by the 10th of April, even though it be coloured by heavy snow-water. It is also certain that in a dry warm season, the river at Kharganoo is fully stocked before that date. But the earliest date at which the fish reach Kharganoo has not been determined yet. Good bags have been made in the lower part of the Giri in the middle of March, and it may be laid down as a general rule that, in a dry season, the river can be fished upwards from the first week in March or at any rate, from the middle of March, beginning at the Jumna. If the season be a late one, or snow be melting from the lower ranges, the river may not be clear until much later. For instance, in 1893, when the winter rains were late and unusually heavy, and when heavy snow lay on the Hills to April or even May, the river did not clear at all during the season. Ordinarily, however, the first week in April is the best time to fish. Later on between April 15th and May, the valleys are hot, particularly in the lower reaches near the Jumna. During this time fishing is trying during the heat of the day, though in the morning and evening it is pleasant. The best time of the day to fish, in the spring and hot season, is the morning and the evening.

Hints on Tackle.—In the spring good sport is often to be had with a fly, particularly at the junctions of the small streams. A

black fly, with a thick body, twisted with silver and a red tail, is a good one for the river. The size of the fly must depend on the water. Madras jungle cock feathers are attractive. In the shallows, a fly of lake trout size will often kill fish up to 5 lbs. in weight, and in heavier water the proper size is that of a medium salmon fly. The fish in the Giri run of all sizes, and whether fishing with fly-spoon, or natural bait, fish may be hooked of any weight from 1 lb. to 50 lbs. Undoubtedly, however, the heaviest fish, on an average, are killed by spinning a small fish, particularly when the water is slightly colored. The small Chilwa will often kill well. Fine fish have been killed with natural bait when the river was very much discoloured by snow-water, at the junctions of the small streams. The fish love to lie in the warm water poured into the river by the small streams, and as this water is clear, the fish can see the bait at such places. In the spring, when the water is very clear and low, the natural bait does not maintain the same superiority. Mahseer will probably be taken in the Giri by any artificial spinning bait, but taking everything into consideration, the best artificial bait appears to be the flying spoon, whether in the autumn or the spring. A silver spoon with gilt or copper back, $1\frac{1}{2}$ to $1\frac{1}{4}$ inches long, has been found the most killing. In heavy water it may, with advantage, be larger and may be weighted. When the river is low and clear, it is unnecessary to weight the spoon, which may then be made of very thin metal. The light spoon, when it is thus used, is very convenient for casting, and may be thrown like a fly. It is essential to fish with fine tackle, particularly in clear water. The best bags have been made with single gut and spoons of the above description. The hooks, swivels, and rings, must not be heavy or large, and if the two latter can be silvered, so much the better. The wire trace (those made by Farlow, 191, Strand, London, are excellent) may be used with advantage, but the swivels should be small. Good single salmon gut answers well, but the Mahseer, being a very shy fish, it must be understood that the finer the tackle used the more probable is success. In the hot weather the fish

take best in the morning and evening. In the autumn, they take best in the middle of the day, when the sun is on the water. Big fish often lie on the shallows, and close to the bank. Heavy pools and runs should be tried with natural bait, as the fly or fly spoon, does not sink sufficiently to fish them properly. When the river is low, the very big fish generally lie in the deep pools, or rather holes, in which alone they can find suitable shelter, but in the afternoon, if not frightened or disturbed, they move into the shallower streams to feed, and may then be taken by careful fishing with a small bait. The necessity of keeping well out of sight cannot be too strongly urged, particularly when the water is clear. In low and clear water, the spoon will not be taken unless where there is a considerable current. Where the stream enters a deep pool, big fish can often be taken, specially in the afternoon.

The length of line required for the Giri is about 100 yards: it need never exceed 120 yards, and should not be less than 60 yards, as very big fish may be hooked at any time, even when fishing with the smallest spoons. The line should be of medium Salmon size, or rather finer when the water is low. Reels must not be stiff, and should run as freely as possible. The rod should also be flexible. Very heavy fish will often be hooked on the smallest hooks, and with fine tackle, and in such case everything depends on the rod yielding to the strain at once, and on the reel running freely. Fishing with a barge-pole, a clothes line, and a meat hook, is poor sport anywhere: in the Giri it can only lead to failure and disappointment. The most suitable rod is a light, flexible, spliced salmon rod, and it need not be more than 16 feet in length. A rod of two pieces is probably better than one of three pieces. A light spliced rod of 15' 6", with an aluminium reel holding 100 yards of fine silk line, leaves nothing to be desired for use in the Giri, during the hot season. A ringall cane makes an excellent rod for spinning the natural bait. Feruled rods, sooner or later go at the joints, and are not satisfactory. The rings should be standing, and a spare top joint, somewhat stiff, is required to throw the natural bait, where a separate rod is not

used for this purpose. A fishing-can may be taken, to hold the baits, though the ordinary earthen chattie will do, and a casting net will be found useful for catching them. For landing fish, where they cannot be brought to a shelving beach, a landing net of large size is the best. To use the gaff is difficult with Mahseer, in consequence of the scales. Two rods should be used, one for the fly, or fly spoon, and the other, ready mounted, for the natural bait. Thus, the heavy pools and runs can be easily fished as occasion requires, and without delay.

General Remarks.—There are a large number of black fish, Kalabanse, in the Giri, which grow to a considerable size. These fish do not, however, take the fly or spoon. They are bottom-feeders, and can only be caught with paste or worms. Sowlie (Murrel) are occasionally caught, and give fair sport. They are generally found in the still pools, where there is a soft or muddy bottom. There is also the so-called silver hill-trout (*Barilus bola*) which is a very handsome fish, and takes the same baits as the Mahseer. The usual size of this fish is between one and two pounds, but they have occasionally been caught as heavy as 5 lbs. They usually lie on sandy shallows, and in long stony runs. The river is sometimes spoiled for fishing purposes by logs of wood being floated down from the forests. When this happens, there is little use in fishing, and the fisherman should either pass beyond the logs, or get well behind them. They move at the rate of about two miles per day, and are sent down in lots of about 5,000 to 10,000. Some of the best sport is to be had at the junctions of the small streams with the Giri. All these should be fished; those shown on the map are the Asan or Simla river, the Joger, Paler, Jalal, Koal, Nait, and Peroo. The river often changes its course after or during the rains, so that what may be good fishing ground one year, is not the next. The fish lie best in pools or runs, where they are least disturbed, and where there is feeding ground for them. In rapid channels, when there is much 'scour,' they are seldom to be had. Some of the bags made in the Giri are given in the Appendix. These will serve to indicate at what

times and place good sport may be expected under favourable condition. It must, however, be borne in mind that as the river often changes its bed, what is a good place one year, may be worthless the next, and the element of luck frequently comes into play. On 8th April, 1890, a fisherman killed between Seoon, and Anoo one fish of 45 lbs., one fish of 19 lbs., one fish of 12 lbs., one fish of 6 lbs., and 12 fish weighing 19 lbs. On 6th April, 1892, the conditions of weather and the state of the river being the same, the same fisherman killed in the same place only one fish of 7 lbs., and eight fish weighing 10 lbs. The details of some of the best bags known to have been made in the Giri are as follows :—

26th March, 1884. Chandni to Myuth Twenty-one fish, weighing 170 lbs., and including two fish of 35 lbs. and 30 lbs., respectively.

27th March, 1884 Myuth to Sattibagh. Seventeen fish, weighing 90 lbs., biggest 12 lbs.

31st March, 1884. Mythoo to Seoon. Eighteen fish, weighing 90 lbs., largest 10 lbs.

1st April, 1884. Seoon. Eleven fish, weighing 75 lbs., largest 25 lbs.

10th November, 1886. Seoon to Mythoo. Sixteen fish, weighing 70 lbs., largest 9 lbs.

14th November, 1886. Myuth to Korilla. Eighteen fish, weighing 100 lbs., largest 45 lbs

18th April, 1888 Sattawan to Korilla. Fifteen fish, weighing 80 lbs., biggest 40 lbs.

19th April, 1888. Korilla. Twenty-five fish, weighing 75 lbs., largest 21 lbs.

9th November, 1889. Sattibagh to Korilla. Twelve fish, weighing 65 lbs., biggest 32 lbs.

11th November, 1889 Korilla to Mandal. Seventeen fish, weighing 70 lbs., biggest 8 lbs.

8th April, 1892. Seoon to Anoo. Sixteen fish, weighing 101 lbs., biggest 45 lbs.

5th April, 1892. Seoon. Thirteen fish, weighing 60 lbs., biggest 23 lbs.

9th April, 1892. Kharganoo. Eighteen fish, weighing 94 lbs., biggest 44 lbs.

During the spring, March and April, high winds often prevail in the Giri valley, especially in the lower half, which render it difficult to fish owing to the dust and sand, but at this time the fish take well, as in fact they generally do when there is a breeze

on the water. If it be intended to fish the Giri from Kharganoo to its junction with the Jumna (about 80 miles) a good supply is necessary for the trip. Plenty of gut, wire traces, silk, wax, 2 doz. flights of hooks, and about $1\frac{1}{2}$ doz. spoons, at least, should be taken. Two or three rods are also required and the same number of reels. If it be desired to fish the Jumna at Rajghat, much heavier tackle is required than should be used in the Giri. The line should be 200 yards, and the hooks stouter. This river is usually fished from "*Sernaies*" or a Berthon Boat, and the best places are at the Giri mouth, at the junction of the Asan with the Jumna, and in the Pounta pool, all of which are within a couple of miles of the Rajghat ferry. The best bait is the natural one, about eight to ten inches long, and it should be well leaded, as the river is heavy and deep. The Asan is a comparatively small river, and fishing therein is good at certain seasons. September and the early part of October, is the best time. Fish up to 22 lbs. can there be caught with the fly spoon. As the river runs down, smaller fish are easily obtained, but in the proper season there is nearly always fair sport to be got in the pools and runs between Futtehpore bridge and the junction, with a small fly or spoon, in the evenings and mornings. The Tonse river, which flows into the Jumna above the Giri, is larger than the latter, but is said to hold few Mahseer. It is a river which is affected by the snows. The Batta river falls into the Jumna about five miles below Rajghat. Some good sport is to be obtained at its mouth, and also up the stream, particularly in the spring. It is a good river for small Trout and Murrel. To fish the Giri, Asan, or Batta thoroughly, it is necessary to wade, in order to command the best runs and pools. This can generally be done without getting wet much above the knees. Warm stockings and thick boots are the best for the purpose, and Khaki colored clothing and hat covers are most suitable."

Appendix.

	AUTUMN (OCTOBER AND NOVEMBER.)						SPRING (MARCH AND APRIL.)					
	Fish	lbs.	Fish	lbs.	Fish	lbs.	Fish	lbs.	Fish	lbs.	Fish	lbs.
Kharganoo	...	1	2	1	2	11	25	5	41	1	4	...
Majere	...	6	15	6	57	2	8	...
Newar	...	5	5	20	40	8	16	2	24	5	20	...
Anoo	4	32
Seoon	...	2	2	7	21	13	30	3	38	6	30	...
Mythoo	...	6	10	12	30	16	70	8	59
Sattibagh	...	10	30	4	16	12	50	7	24	16	100	...
Myuth	16	40	21	170
Chandni	...	24	120	10	40	17	170
Korilla	...	26	80	10	45	18	100	10	90	17	80	...
Koona	7	33	16	60	11	45	2	10	...
Mandal	11	40	14	40	4	16	...
Sattawan	...	15	50	2	3	3	6	18	63	9	45	...
Goorkowalla	...	7	11	11	90	2	10	...
Rajghat	11	20	10	75	4	20	...

THE SIRMOOR FISHING CLUB.

The subscription to the Sirmoor Club is only Rs. 16 yearly. Gentlemen wishing to join the Club are requested to communicate with Colonel Deane, Simla, who has consented for the present to act as Honorary Secretary, and to whom all subscriptions should be paid.

33.—*Fishing in Dehra Dun Rivers—Jumna, Arsun and Giri—by T. P. LUSCOMBE, ESQ.*

Distance some 26 miles from Saharunpur, *via* Chakrata Road to Arsun Bridge; best way to reach the water is by dāk from Saharunpur. There is a Forest Officer's bungalow at Rampore Mandi, on left bank of the Jumna, looking down stream. The Rajah of Sirmoor's staging bungalow is on a cliff some 1½ miles below the mouth of the Giri opposite Rampore Mandi—mouth of the Giri at Batha Mandi. Permission is required to use the Nahun bungalows. To fish the Giri and in fact all these streams, it is best to have a good pony, start at 3 A.M., ride out and fish back, having *chota hazri* to meet one

half way at some known spot. The best time of the year is from 15th March to 10th May for the Jumna—and from 15th March to the rains for the Giri and Arsun. There are Mahseer in the Jumna up to 100 lbs., in the Giri to 25 or 30 lbs., and in the Arsun to 10 or 12 lbs. Trout run up to 3 lbs., but are scarce.

The best way to fish in the Jumna, is with two to four inch flying spoons (Luscombe & Co.'s), gilt or silver gilt, from boat, Surnai or raft—Blackamoor and Cock-of-the-walk flies take too: rod, an 18-foot one or over, and moderately stiff.

For the *Giri*.—Spoon flies from one to two inches in length—gilt ones best. Flies with a lot of yellow and gold tinsel, an 18-foot rod—water generally clear, and fine tackle most successful.

For the *Arsun*.—Spoon flies from $\frac{3}{4}$ to $1\frac{1}{4}$ inches, gilt best; a 12-foot rod and fine single gut traces.

In the Jumna the best places are—

- | | |
|--------------------|-----------------------------|
| (1) Mouth of Giri | (4) Mouth of Koonur Stream |
| (2) Mouth of Arsun | (5) Runs below Batha Mandi |
| (3) Pounta Pool | (6) Right down to Tajawalla |

The Giri is a succession of runs up to above old Sirmoor. The best place is the "weir run" and what we called the "Castle run" from a large rock on one side like an old castle. The Jumna River is first-class for big fish, until the snow water comes down, generally from 10th to 20th of May, when only bait fishing (chupattie) will kill. Pounta Pool is a grand turning pool, and holds enormous fish, but they are not easily got, as there is a temple above the pool from which the fish are fed, and such fish rarely take spinning bait or fly well. There are many runs all fishable from a boat, raft or "Surnai," but very few can be properly fished from the bank, although below Batha Mandi there are some places fairly accessible from the bank. When fishing in the Giri, we lived at Rampore Mandi bungalow, and rode off across country—generally as far as the "weir run"—two rods, and taking opposite sides or alternate pools, fished down. Breakfast met us at the big cotton tree, half-way, and we generally got back 10 or 11 A.M., at latest. The best bag

made in one morning was 22 fish, the largest 15 lbs., down to 3 lbs.

I killed one 20 lbs. fish at the "weir run" afterwards, and two more out of the "Castle rock run." The Giri is not a snow river, but thunderstorms are frequent, and generally spoil the river for two or three days, but it is best the day it clears after such a storm. The Arsun is a small river coming down from the Dun from somewhere near Dehra, and except at one or two pools, and at the mouth, the fish generally run small. I have, however, known a gentleman take 73 fish in one day's fishing with one inch gilt spoon fly, the largest 6 lbs. down to five or six ounces; these little fellows are here very game, and go for even a larger spoonfly every cast.

Trout turn up occasionally, but if any Trout are wanted, I should use a tail Blackamoor bright fly on No. "8 H" hook, and one dropper on No. "6 H" hook; green drake, and these will kill Trout well.

34.—*Notes on fishing in the Jumna River* by MAJOR-GENERAL C. S. LANE—*Dated 20th November, 1887.*

"I was down on the Jumna for a few days lately. I left this 26th October. I went to Pounta, just below the Arsun Junction, the best place in the whole river. I got some small fish of 8, 10, 12 and 18 lbs., with 2-inch spoon and phantom, but the second and third day could not touch a fish. I then got hold of the only man (Gunga) in this part of the Dun who has a net and got some bait. I put on any size, say from 6 to 12 inches. The instant the bait touched the water (of course I mean when the fish were on the feed) I had one, and so had my brother, Mr. W. Lane. I only had two hours' real sport as I met with an accident after landing my second fish, a 50-pounder. In cutting the hooks out I got one into my thumb close to the nail, right into the bone, and as we could not get it out, I had to get on a *Surnai* and go down to Badshah Bagh, 15 miles off, where the Rifle Brigade by good luck was, and had it cut out. Well, to resume. I began to fish at about 9 A.M., in

an hour I had lost five large fish, some over 40 and 50 lbs. I was using treble gut for the flights as strong as could be. They smashed these each time, (the gut may have been bad, though I didn't fancy it was, and I had only made them up the night before); at last, however, I got a flight to hold and landed one of about 26 lbs., and then the 50-pounder, when, as I said before, I had to bolt! It was a sell? The next day (I got back at 2 A.M.) I tried again, but only got one of 32 lbs. After this they stopped taking, and we left next day. After a rest of a few days, the fishing begins again. At all other places below and above they take 2-inch spoon and phantom well. I had my Berthon boat with me and so had my brother. I am going down again soon and am coming back through the Kiardar Dun. I saw heaps of Cheetul, but had no rifle with me. I shall have a try for these next time. I hear J. D. got a 52¼-pounder near, or at Sutli-Bagh, on the Giri, on the 6th instant. A good fish so high up? and on single gut!

35.—*Notes on fishing in the Sooswa, Arsun and Giri Rivers, Dehra Dun*, by SURGEON-MAJOR MACLAREN, M.D.

Fishing in Dehra Dun, North-West Provinces, 40 miles from Saharunpore by dāk gharry, thence by local dāk. The Sooswa joins the Ganges, the Arsun and Giri join the Jumna. They are distant about 25 miles from Dehra. There is no house accommodation, but any amount of room for tents. All supplies must be taken from Dehra. The best time of the year to visit the water is March, April, October, and November. The fish are Mahseer in the Sooswa and Arsun up to 15 lbs., but at the junctions up to 50 lbs. The fishing is by wading in the small streams, by boat or *Surnai* at the junctions. The *Surnai* men go to their homes by 15th April, returning by October. The fish take a large gold spoon, or a four-inch phantom. The tributaries are best fished with a small gold spoon, or a Scotch Salmon fly. At the junctions, the best time to fish is at sunrise and sunset, but in the tributaries up till 10 A.M. The fish never take well when the moon is full, unless

after a spate when the water is clearing. At the junctions, natural bait is preferable to phantom. A small gold spoon is best about 10 A.M., in the tributaries. The Giri is in the Maharajah of Sirmoor's territory, and it would be well to ask permission (always granted if polite requests be made) before proceeding, otherwise obstacles may be thrown directly in the way.

There is a very good stream for the fly spoon in the beginning of April a few miles from its mouth.

36.—*Fishing in the Giri, by "Trout Rod," extracted from the "Asian" of April 16th, 1889.*

"Dated April 4th, 1889.

A few notes about the Giri may prove of interest at this time, the best of all months for fishing tributary rivers. I left Nahun on the 25th ultimo, reaching Pounta on the Jumna, where the great pool is so well known to fishermen. It is half a mile below the Asun junction. I did the 28 miles from Nahun before 3 P.M., and lost no time in putting my 16 feet "Castleconell" together, and having previously ordered my Berthon boat to be carried up, off I started for the Asun. After getting a small fish of 10 lbs., near the end of the junction run, I began to work the boat upwards for the big 'uns at the top of rapid, when I found to my disgust that the left bank, which we always fish from, had silted up since the heavy storm of three weeks ago, and I had considerable trouble in reaching the top, where I knew the good fish must be. Arrived at the spot I put on a 6-inch blue and silver phantom (the best of all baits to my mind, next to the natural bait) and was at once fast into a very heavy fish. He seemed disinclined to face the rapid, and for a good quarter of an hour I played him where I hooked him; then all at once down he went and I after him, but not as I always do straight down stream but slowly, my two men pushing the boat laboriously in and out of the stones. Urge them as I would I was too late, and with no end of a lot of line out, my friend had gone down under a huge and well-known

stone, and there he stayed, hardly moving, till at last my reel-line broke and my first large fish of the season was no more felt (for I had never seen him) by me!!

Had I not been in such haste to begin, I should, as I always do, have tried the line well before wetting it—and let me here remark that extra care should be given to the testing of the line the first time you are out, after months (in my case after six months). It was a case of 'most haste, worse speed,' for had I removed only some few feet of the line, I and the fish would not have parted company.

I fully intended having another try next day, but in the morning I found the river full of snow water, and as it was also full of log rafts, that curse of the fisherman, I at once made up my mind not to waste my week's leave, waiting for the water to clear but to go up the Giri, which enters the Jumna $2\frac{1}{2}$ miles above Pounta and work back to Nahun that way.

My first march—eight miles to Goorkha-walla—produced nothing but small fish, though the water was lovely and runs plentiful. This portion of the river always holds good fish, being so near the Jumna, and I could not make out why I did not meet a single good fish. I ascertained on inquiry that the natives had seen the fish, some very big, floating down *dead* in hundreds after the hail-storm we had in these parts close on a month ago.

Now I wonder if it is true, as the natives assert, that when hail falls the fish greedily devour them with a fatal result, as according to the native belief the eyes are nearly forced out of the head, and the fish rapidly swells and dies. I am inclined to believe this, so far as the fish being destroyed goes, for I remember some years ago we had a great hail-storm at Pindi, when many hundreds of fish of all sizes were picked up dead on the banks of the "Sohan" and "Rawul," and both being small rivers, the fishing was utterly ruined for some considerable time. Perhaps "Yuba Bill," or some other well-known sportsman, may be able to throw light on this matter. If true, it is very sad, for a hail-storm is not a rare occurrence, and though we can and do, wherever possible (and it is generally possible except

in the Punjab!) prevent poaching and wholesale netting, I'm hanged if we can stop hail-storms!

I went on next day to "Suttaon," six miles from "Goorkhwalla;" good water the whole way, but fish again small, and I began to fear the hail had done for my fishing this trip. Shot a few murghies for the pot.

Next day to Chandni, supposed to be six or seven miles, but in reality nearer nine or ten I believe. This is one of the best parts of the Giri in my opinion—scenery beautiful and lovely water the whole way. Size of fish improving, though I only got eight in all, the largest not quite 28 lbs. and several nice ones of 8, 10, 12 lbs.

During this march I saw a fine Maha (Sambur) leisurely crossing the Giri. Though the stream was deep and strong, he went over with the greatest ease, and as straight as a die! Half way across he heard or smelt us, and turned his head to have a good look at us; seeing no gun, but only a fishing rod with which he was of course quite familiar, he thought it was all right and went on. It *was* all right as it happened, for as bad luck would have it, my rifle had on this particular occasion been left behind, or don't think the Maha would have crossed to the other side! I was within 60 yards of him. However, to resume, I had a good day's fishing (the hail taken into consideration), that's to say by contrast with the very poor sport of the previous two days. It wasn't at all hot all day, and I thoroughly enjoyed it, and after 12 hours' walking and wading was quite ready for dinner, and a couple of pipes, and then bed, all following each other pretty quickly on my getting into camp after dark. Next day on to Sutti-Bagh, that very lovely camp just half-way from the Jumna to where the fishing ends at Karghanoo, eight miles below Solon.

Fish again small and not too plentiful. I had here to leave the Giri and climb up to Punjal, only some six miles, but a horrid march, nearly all up-hill and very steep too. Shot a few pheasants on the way. Had breakfast at Punjal and on to Nahun,

nine miles, which I reached before 3 P.M., and thus ended a very pleasant little walk of exactly one week.

I left one fisherman on the Giri, and since my return I hear that two others have started from Rampore Mundi; as I happen to know one of them well, I shall write and ask if they noticed any deficiency either in size or number of fish, though even if they found the fish plentiful, it would not disprove the hail theory, as at this season the fish run up in large numbers from the Jumna.

I take this opportunity of telling all fishermen that H. H. the Maharajah of Sirmoor is about to make over the Giri from Rampore Mundi (Jumna) right up to Karghanoo below Dugshai and Solon, to the D. D. F. A., at Dehra, on a lease renewable from year to year.

It will be good news to all sportsmen that at last we have really put an end to the wholesale destruction of fish in this the best of all our rivers, both below and above "Newar," where the fish have for years been ruthlessly destroyed by a system of long, wide, stake nets. They are no longer permitted, and the Giri is now an open river.

The Maharajah has followed well the noble example, set two years ago by Rajah Moti Singh of Poonch, both in preserving the river, and (though this is to come) in providing rest-houses at Rampore Mundi and Sutti.

"TROUT ROD."

With reference to the above remarks regarding Mahseer eating hail-stones, I would remark that I have several times heard this, but have not seen fish die from the effects of them. The natives assert that they die at once from eating them, or they may possibly become stunned by the concussion in the water caused by the falling hail-stones. I am inclined to believe the latter. In the above interesting letter "Trout Rod" calls on "Yuba Bill" (a well-known fisherman) for his opinion on the subject, and here it is—

"As 'Trout Rod' wishes to know (*vide* his interesting letter

in your issue of the 16th instant) whether I have any experience of fish having been killed by devouring hail during a storm, I write to say that this is the first I have heard of their suffering in this way.

I have, however, on more than one occasion observed fish rising freely during a hailstorm, notably on one occasion, when fishing at Dehra Gopipur in the Kangra District in April, 1883. I was caught in a very violent hailstorm with thunder and lightning accompaniments, and in addition to seeing fish rising freely on all sides from the moment the storm commenced, I also had runs at my spoon at every throw; this lasted for a quarter of an hour, when the lightning appeared to be so very close that I retired under shelter for the time. I had only taken one small Mahseer of 4 lbs. during the storm owing to my hooks being very blunt. It appears to me now, looking at the incident by the light of 'Trout Rod's' experience, to be as likely as not that the fish were taking hail during this time. I hope to have a couple of months among them next year, in April and May, and will watch for any signs that may support the theory now aired. The only argument I can see against this theory is that if the Mahseer took hail as freely, and with as fatal results as the natives imagine, we should have no fish left in our hill tributaries of large rivers."

"YUBA BILL."

37.—*Notes on fishing in the Giri river* by CAPT. G. R. CRAWFORD, 28th P. I. (1895).

I have just returned from the Giri, and a short account of that river in May will perhaps be of some interest. Last year I fished up from Rampore Mandi to Koona, spending fifteen days in the latter part of May on the lower part of the river, and got fair sport, my best fish being 14 lbs. The river at this time of the year is low and very clear, and I found very small and light fly spoons killed best, 1 inch and $1\frac{1}{4}$ inch. I fished with a $13\frac{1}{2}$ feet fly rod, which I found commanded the water. The river in May is not much below Sattawan, as it splits up into a lot of small

channels. There were, however, one or two nice pools about Goorkowala where these channels joined together.

This year I started at Karganoo on May 4th, and did very badly for some days. I don't think there were many fish about at the time. It was not until I got down to Mythoo, that I got any sport; from there down to Chandni I found more fish. On my returning up the river, I had some very good days about Newar and Majere and found plenty of fish, where there had apparently been none earlier in the month. My best fish on this trip was 12 lbs., caught above Newar near Raona, and I got a 9-pounder, almost immediately afterwards, a little higher up. I used a double-handed 13½ feet fly rod for the deeper runs and a 1½ inch spoon, and for the lighter waters and shallows a light single-handed 12½ feet rod and 1 or 1½ inch fly spoons. On my return journey I saw a good many fish about up to 30 lbs. even as high up as Kharganoo. With whatever rod or bait you may be using, strong single gut traces are necessary. One as a rule gets four or five small fish up to 4 lbs. or so in May in a day, but bigger not unfrequently take you, and if you are trying to fish very fine, break you.

I found in May that the pools as a rule consisted of a deep hole at the top with the water in eddies, and immediately came a long shallow. These places as a rule were not much good. The best places I found were where the river joined after running in two channels or else long quiet runs, water being two or three feet deep, but deepening round rocks, or under a steep bank; such places were easily fished wading, and often held fish. The small stream junctions are no use in May, as the little tributaries are mere tricklers, and are moreover colder than the main river. There were many nice runs too, immediately below heavy falls. These as a rule being too deep for wading, for some distance. In such places I think a small natural bait perhaps killed best. But I found a 1½ inch spoon killed well, and seldom changed it. I never found the fish taking really well in May in the day time, or morning, though one occasionally got runs at all hours. They seemed to feed best about 5 to 7 P.M.,

and then to be out on the shallower water more. The best places, as far as my experience goes, were about Newar and Raona, at Banohal below Anoo, and further down Myuth to below Chandni.

I think the best way to fish the Giri taking the first two months' leave, would be to start with ten days or so about the Arsun and Giri junctions, then work up the river, halting two or three days at each camp, as the climate becomes cooler as you go up and you are more likely to find fish higher up at the end than the beginning of May, and you also get less wind in the higher part of the river. This wind in the lower part of the Giri after the middle of May, makes fishing a toil and labour. It, however, generally blows its hardest in the heat of the day. I got one or two fish when it was getting too dark for spoon fishing on a white fly, but only very small ones.

It is always as well to take a gun and rifle on a trip to the Giri. There are lots of hares, jungle fowl, and Kallige Pheasant about, and Bear and Kakur up above, and Sambhur and Cheetul down the river. There are also Leopards and Hyeenas about the hills. Even if you are not shooting for sport, a jungle fowl or a Kakur make a pleasing variety to the daily ration of mutton. Fowls you cannot buy.

Another useful thing to have is a casting net; you can get hold of men to get you bait about Kharganoo, but starting from the junction and fishing up you can't get men with casting nets.

The above notes on May will perhaps be of some use as though it is not the best time for the river, it is in the leave season and a very good way to take the first two months would be fishing up the Giri with a fortnight at Simla to get cool in at the end of your trip, before returning to face the hot weather.

38.—*Notes on fishing in the Jumna, Arsun and Giri*, by CAPTAIN R. H. G. HEYGATE, *The Border Regiment*.

I have just come back from a ten days' trip to the Jumna, Arsun and Giri, and will give you my experiences.

March 17th, 1888.

I went to Jagadri, and by *ekka* to Dadupur, and on to Tajuwalla. There I found the river cut off and fishing only possible in the canal falls and above.

One day here out of the two I spent at Tajuwalla, I got six fish, all on spoon-fly, biggest 7 lbs., down to $1\frac{1}{2}$ lbs. I could not get hold of any big fish at all. Hearing that the canal officials were coming up to inspect and occupy the bungalows, I marched twenty miles along a bad road, all stones and sand, up the Jumna to Rampore Mandi, where I crossed by ferry and occupied the Forest Bungalow. Here I was close to the junction of the Arsun and Giri rivers, and thought I should have splendid sport, but luck and weather were all against me; I fished five days and had no sport. All the *Surnai* men had gone to their homes, and without a *Surnai* one cannot reach the main river, so I had to confine myself to the Giri and Arsun. I got some small ones on spoon-fly and on Irish salmon flies with plenty of gold and yellow tinsel. The weather was bad, cold and stormy, and I think I was a bit too early for this part. It is lovely water, and Pounta Pool and the mouths of the Arsun and Giri are splendid. I came back by *ekka*, forty-five miles, to Saharanpore.

39.—*The Giri river compiled from various sources.*

A Berthon boat is useful for crossing, but is not necessary for fishing. You usually get wet up to your thighs in crossing the fords. Buy locally twelve sheep at Rs. 3, and twenty-four fowls, for a two months' trip. *Ekkas* at Saharanpur cost Rs. 5; coolies on the Giri cost 4 annas. *Atta* for the servants can be obtained at all the villages. Do not forget your waterproof, and have a water-tight tin box. A milch goat bought locally can go with your live sheep.

The mail train arrives at Saharanpur at midnight. Arrange with the "Dāk contractor, between Saharanpur and Kalsi Saharanpur," to have a dāk to meet the train. Have *chota hasri* at Badshai Bagh. Breakfast at the Fatehpur Dāk bungalow, forty miles from Saharanpur. The dāk gari is very

apt to break down, and goes at the rate of five miles an hour. Walk over the Srivaliks; you may get some shooting, and will go as fast as the dāk. Before breakfast get hold of the younger brother of the dāk bungalow Khansama, and of a man called Creeper. Send Creeper off with your camp to the Lambardar of Bangrol, with a request that he will have milk, eggs, etc., ready at the camp that evening, *but take some with you*. Keep the other boy to show you the way. Camp below the village of Bangrol, in the jungle half a mile nearer the river, not far from the stream of water near the cliff. The Dhobi's Ghat run and pool is full of fish. The shooting is reserved by the Maharaja of Nahan, but he will give a permit for a week. Chital, peafowl, and jungle fowl are common. If everything else fails, try spinning a dead bait Paternoster, about two miles above the fishing ground where the precipice runs sheer down into the water. You must cross to fish it; even then it is awkward work. In the Asan there are two good pools between the bridge and the junction. One pool is opposite the Dholpur bungalow, the other is nearer the mouth. The best water of all is above the bridge, and $\frac{1}{4}$ mile above it. The bridge is $\frac{1}{4}$ mile from the bungalow, which is on the right bank, and which you can occupy for a night without asking permission. Trout at the lower end of the pool with fly.

You may start from Simla, near which the Giri begins to be fishable. It does not hold anything big until Seoon, a village on a plateau. The camping ground is just below in a shady little mango grove by the river side. Close behind it is a long deep pool, sheltered by a high bank. A few hundred yards lower down, the river is joined by the Pakla nullah, full of live bait. There is nice water for a mile below Seoon, and then the river enters the Majhai narrows. Here there is a succession of lovely pools and rapids. Passing clear of the narrows, the river enters a long, straight valley, at the far end of which lies the village of Mythoo. Then rounding a rocky promontory, it leads through a second valley, and, twisting sharply to the right, enters the Sattibagh narrows. The Jogur nullah joins it here, and there is an-

other string of glorious pools, which are about the finest in the river. Sattibagh stands at the junction of the Jalar stream with the Giri, and it is one of the prettiest camps in the valley. There is a wooden bridge here, and Rainka Talao is near, A mile and a half below Sattibagh, the Giri makes a wide sweep to the left, and from here there is a nice pooly water all the way to Chandni. Here the river breaks into branches, some of which are underground, causing the volume of water to diminish for a time. Beyond Aboan the river has recovered its volume. We now come to the best part of the river, the stream being swift and the runs deep and rocky. This long stretch extends from Koonah to Sirmur Tal. The water is magnificent, especially near Mandal and in the Sattawan narrows. But the going is very rough, and the fishing often very difficult. At Sirmur Tal the best place to camp is in the Shisham wood below Sattawan. A big pond lies just opposite to it, hidden from the river by a high bank. A mile and a half below Sirmur Tal are two splendid pools, about the last and the largest on the river. There is something in one of them where you regularly get broken.

40.—*Fishing at Raiwala, near Saharunpur and Hurdwar, by*
LIEUTENANT-COLONEL C. L. PRENDERGAST.

The fishing place is Raiwala on the Ganges, six miles above Hurdwar. It is a night's dāk from Roorkee, the nearest railway station.

The rivers are the Ganges and the Song and Suswa, which fall into the Ganges a short distance from Raiwala. The best way to reach the spot would be by train to Roorkee and thence by *doolie*. There is a camping-ground on the right bank. The best months are March, April, October, and November. The fish in the Ganges run to any size, and in the Song and Suswa up to 5 or 6 lbs.

These are Mahseer, there are also what are called Trout in India. Spoon is the best bait, but have known them caught up to 20 lbs. with fly. The fishing on the Ganges is usually done from *Surnais*, i.e., a charpoy on mussucks. You can fish as

far as Hurdwar in this way. In the smaller rivers by wading or from the bank.

The strongest tackle is generally used in the Ganges, as you may get fixed in a big one at any moment, and the water is heavy. A wire trace and a 2½ or 3-inch spoon should do, but I have seen very large spoons and phantoms used. This is a matter of taste, as you can follow the fish anywhere on *Surnais*. The *Surnais* men are generally procurable in the season, and they are well up to their work.

41.—*The following Notes regarding fishing at Dadupore and Tajuwala, North-West Provinces, furnished by H. S. DUNSFORD, ESQ., District Superintendent of Police, Rohtak.*

April 28th.—Arrived at Dadupore in the morning. Water slightly discoloured by melting snow from the hills, but quite fishable. In the evening got an 11 lb. Mahseer in the Some. I found that on the 25th instant Mr. Day, Executive Engineer, had taken twelve Mahseer in the Some, weights as follows:—10 lbs., 11 lbs., 10½ lbs., 10 lbs., 9 lbs., 5½ lbs., 5½ lbs., 3 lbs., 4 lbs., 3 lbs., 5 lbs., 10½ lbs., = 87½ lbs.

April 29th.—Struck a good fish, probably nearly 20 lbs., which gave some capital runs, and when nearly exhausted broke a stout treble hook *by compression*, and got away.

May 1st.—Rode up to Tajuwala, fourteen miles above Dadupore, fished in the head of the canal and in the river (Jumna) below the sluices. Water getting dirty, killed one small fish.

May 2nd and 3rd.—A thick red spate coming down, the result of storm in the hills. Fishing quite hopeless.

May 4th.—Tajuwala.—Snow water coming down. A blank day.

May 5th.—Back to Dadupore, fished at canal falls under the bridges, lost a fair fish by breaking of spoon mounts. Water rather dirty during the day.

May 6th and 7th.—Water variable, thick for a few hours in the day, clearing towards evening, and in fair order for a short time in the mornings. Blank days.

May 8th.—Water much the same as on preceding days. In the evening hooked something monstrous in the Some, which went straight down stream with an irresistible rush, taking out nearly 90 yards of line without a check. When I saw the line getting thin on the reel and apparently no prospect of a stoppage, I jumped down the bank with the intention of running along the side, and in jumping the handle of the reel checked against my sleeve for a moment, and my line came back minus the wire trace.

May 9th.—Water in fair order, killed a $14\frac{1}{2}$ lbs. Mahseer in the morning, which gave excellent sport: a 4-pounder in the evening, and a Trout, 1 lb. in weight, all three on the smallest sized Devon Minnow, about $1\frac{1}{2}$ inch long.

May 10th.—Blank.

May 11th.—Two fish, 12 lbs., and 8 lbs., during the evening in the Some on natural bait.

May 12th.—Lost a fair fish by breakage of treble mount.

May 13th and 14th.—Water clear, but very low in the Some, where I foolishly wasted my time. If I had tried the canal falls on these days, I should probably have done well.

May 15th.—Rode to Tajuwala.

May 16th.—Fished in canal head and river sluices, lost a fair fish in canal by breakage of wire trace. Stormy all day, and water rapidly fouling towards evening.

May 17th and 18th.—Water very dirty and fishing hopeless.

May 19th.—Back to Dadupore. Water still dirty, tried natural bait, but without success.

May 20th.—Water clear. Two small Mahseer in the morning, $6\frac{1}{2}$ lbs., and 5 lbs.

May 21st.—Water fairly clear, but a windy day, and Mahseer not taking. Took 50 *buchwas* on a Mahseer fly.

May 22nd.—Two Mahseer in the morning, $8\frac{1}{2}$ lbs., and 6 lbs. Lost another by breakage of mounts.

May 23rd.—Ran three fish on natural bait, all of which got off. A promising morning up to 7-30 A.M., when the snow water came down rapidly.

May 24th.—Abominable luck. Having run out of mounts, I manufactured some of twisted wire which stood a 12 lbs. pull when testing, but broke like thread with fish. A capital afternoon for fishing. Ran seven fish and lost them all by breaking of wire either in mounts or traces.

May 25th.—Took a 14-pounder in the Some in the afternoon, which gave splendid sport. It took me half-an-hour to land this very game fish.

May 26th to 29th.—Snow water coming down steadily, only tried fishing once during these four days for an hour.

May 30th.—Water clearing, but a strong, cool wind blowing, and fish not on the take.

May 31st.—Killed a 20-pounder in the canal in the morning. This fish sulked like a Goonch (for which I took him) at first, and was eventually landed with almost no play, though in excellent condition. He was evidently tired out by staying for some time at the head of the rapid before he took me. A 14¼-pounder in the evening in the Some which gave the best play of any fish this season.

After this I remained at Dadupore, till the 7th June, but took no more Mahseer.

Result of this trip = 14 Mahseer, weighing 126¼ lbs., average weight 9 lbs. The take has been numerically small, and the fish have not been heavy, but the merits of Dadupore and Tajuwala as fishing places are undoubtedly great in spite of this. Dadupore is very accessible, being twelve miles only from the railway station of Jagadhri, which is within a short railway journey of Umballa or Meerut. Tajuwala is fourteen miles above Dadupore, and the head of the Western Jumna Canal. My visit was very late in the season, and the two Canal Engineer Officers, resident at Dadupore, Messrs. Phelan and Day, had excellent sport during the month of March and the early part of April.

The artificial baits, which appear to be most taking here, are the Silver Devon Minnow, in sizes from 1½ inch to 4 inches, and silver spoons from 1½ inch to 3 inches. The spoons should

be invariably used with flying mounts instead of the old head and tail trebles ; the difference in spinning is something wonderful. Luscombe manufactures most exquisite flying mounts, consisting of an eyed head treble to fix on to split-ring and two flying trebles. These are all three very small, and mounted on double gut. The hooks, although so small, will hold anything, but one grave defect of the mounts is the rapid fraying which they undergo ; one mount can rarely be trusted to take more than two fish, and sometimes not even that. This defect is common to the Devon Minnow mounts also, and until it is remedied they cannot be considered perfect, although for spinning easily and accurately with no wobble they leave nothing to be desired. One of Luscombe's hogbacked spoons with these mounts, a small swivel connecting split-ring and trace, and a double swivel between the upper end of the trace and the line, commences spinning most perfectly directly it touches the water, and the slightest draw is sufficient to work it even in standing water. These mounts should be specially ordered, or larger hooks with unnecessary tinsel about them will probably be supplied. In ordering from Luscombe a considerable margin in respect of time should be allowed, as I found the supply occasionally delayed. This delay occasioned my bad fortune on the day when I ran seven fish and lost them all, on mounts roughly made on wire.

Messrs. Phelan, Day, and myself found our wire mounts most unreliable. They were made of English wire, twisted on gut twisters and tempered after twisting over a kerosine lamp. A trace made in this way of double wire would stand the test of a direct pull of *twenty pounds*, which should have been enough to hold the biggest Mahseer in the river, yet it would constantly break in the most inexplicable manner with almost no strain on it. This could only be attributable to kinks caused by throwing. Mr. Phelan tried the experiment of twisting two double wire traces together, making a trace four wires in thickness. These were practically unbreakable by direct strain, and held some good fish, but even these broke without sufficient reason. The un-

reliable nature of these traces is a great drawback, as if they fulfilled the promise of strength indicated by testing before use, the trace of double wire should be sufficient for all ordinary purposes, and is more nearly invisible in any sort of water than anything yet invented. Any information regarding a really reliable trace, fine enough for clear water, would, I am sure, be a great boon to all fishermen. In conclusion, a word about buckle swivels; they are wonderfully handy and useful for rapid and easy changing of traces, etc., but are not to be trusted. On two occasions my traces became unbuckled and were lost when spinning, and one or two instances of a similar misfortune with other fishermen came to my notice during the time I was fishing at Dadupur.

42.—*Notes on Fishing at Narora, North-West Provinces, by*
CAPTAIN MAYCOCK, *Army Pay Department.*

Place.—Narora, head of Lower Ganges Canal, small village, four miles from Rajghat Railway Station on the Oudh and Rohilkhund Railway. Bungalows of Executive Engineer and staff. Permission to occupy the inspection bungalow can be obtained from the Executive Engineer in charge, Railway Station, connected with Narora by a tramway. Trollies to be obtained by asking the Executive Engineer. No supplies obtainable except ordinary village ones, such as fowls, milk, etc; ample room for tents all round; nearest large town is Allighur, junction of East Indian Railway and Oudh and Rohilkhund Railway. The fishing places are within $\frac{1}{4}$ mile of the bungalow. Fishing is in River Ganges. Best place in a large pool, below sluices of dam and below the weir. The sluices are only open when river is high; closed at other times. Open beginning of May to end of rains. When open, very large Goonch are to be caught. All the large fish of accompanying bag (given in detail farther on) were caught in the pool, (almost still water), and with sluices closed; the Trout and Buchwa on the other side of river, below the weir, over which a good fall of water was running,—water moderately clear. Best time seems from February to May, but not certain. Mahseer are often seen, but won't take

anything. Only two have been caught with the rod for years, the last, 3rd April, 1887, with spoon,—in still water and sandy bottom, weight 25 lbs. Other fish, Trout, Buchwa, Cheela, Rahu, and a large variety of “fresh-water sharks.” The best bait seems to be silver spoons $1\frac{1}{2}$ to 3 inches. Live-bait on Parson’s tackle, with treble instead of single hook and spinning dead-bait for the sharks. Small half and one-inch silver spoon flies for Buchwa and Trout.

We did not try flies, phantom Minnows, or other artificial baits.

We always mount our spoons with flying trebles, and on a two-inch spoon, the end treble is from 2 to $2\frac{1}{2}$ inches from the end of the spoon. This arrangement takes numbers of fish that come short. We make up our own mounts, and find that by far the best plan is to tie the hooks on to two or three strands of gut, not twisted or plaited. We never, or very seldom, break our mounts even with sharp teeth of the sharks. A Masheer could never cut them.

We make up our spinning traces from Salmon gut obtained from Walsh, Lovett & Co., of Calcutta,* Agents for Alcock & Co. His quality is first class, and an order is usually sent by return post if the articles are in stock.

Our plan is to tie two lengths, side by side, to two more lengths side by side, by “fishermen’s knots.” If drawn together till they jam, they never slip. Of course the gut is very well soaked first. We have two German silver swivels—one in the centre and the other at the end—to attach to the splitting of the spoon. These are fixtures knotted on to the gut trace. The swivels are seven-eighths of an inch long. I have never yet broken one of Walsh, Lovett’s German-silver swivels or split-rings in a fish. To make the swivels work and to prevent kinking, we have a very simple but efficient plan, *viz.*, a small barrel lead with a wire loop at the end.

*N. B.—The firm of Walsh, Lovett & Co., mentioned by Captain Maycock, have lately transferred their business to Walter, Locke & Co., of Calcutta, who carry on the fishing tackle business just the same.

Pass a bight of the gut trace above the centre swivel (well wetted) through the wire loop, and pass the loop of the bight over the other end of the lead. Draw the gut tight. The lead then hangs straight below the spinning trace.

The only objection to it is, that it does not look neat; but this is a small matter when it prevents kinking, which it does most successfully. Lastly, we use 14 feet double-handed Trout rods, but with plenty of line (about 100 yards of No. 3 Standard Waterproof American).

The 41-pounder (Paransi) was killed on one of the above rods in about 30 minutes. Fishing with a light rod, such as the above, is no labour, as I should think fishing with an 18-foot Salmon rod and 200 yards of line must be.

A sketch of Captain Maycock's method of mounting spoons and attaching lead to prevent kinking will be found among the Plates at end of Book on Plate No. 10.

Diary of a bag made at Narora, North-Western Provinces, head of Lower Ganges Canal, by two rods in April, 1887.

On the 9th and 10th April (moon nearly full and no wind to speak of)—

26	Gwalli or Laki	Weight 154	lbs.
8	Tengra	" 55	"
2	Paransi	" 61	"
1	Murrall	" 7½	"
2	Mohi	" 17½	"
2	Rahu	" 1½	"
28	Buchwa	" 13¾	"
2	Trout	" 1¾	"
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Total	71 fish		Weighing 312 lbs. in two days.	
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The heaviest Gwalli was 11 lbs.; heaviest Tengra, 14 lbs.; heaviest Paransi, 41½ lbs.

All these fish were caught on 2-inch silver spoons on flying mounts, double gut casts, fourteen-feet double-handed Trout rods, including the 41½-pounder, which was weighed several hours after capture.

On the 21st, 22nd, and 23rd of April, the following were caught :—

2	Gwalli	Weight 10	lbs.
9	Tengra	„ 28½	„
1	Rahu	„ 2	„
95	Buchwa	„ 33½	„
46	Trout	„ 21	„
2	Goonch	„ 12	„
Total 155 fish					Weighing 107	lbs.

No moon, strong hot winds. The Gwalli, Tengra, and Goonch, were caught with live-bait, and they would not look at a spoon; Buchwa and Trout all caught with one-inch flying silver spoon. The names given are local native names. The Gwalli is the same as H. S. Thomas' Wallago Attu, the Goonch is Bagarius Yarrellei, and the Gwalli is also called very generally Mullee.

43.—*Fishing in the Surjoo, near Bagesar, Kumaon District,*
by CAPTAIN W. T. FAIRBROTHER, 13th Bengal Infantry.

District Kumaon, near Bagesar, Indian Atlas Sheets No. 66 S. E. and S. W. (quarter sheets), about seventy-eight miles from nearest railway station, Kathgodam, at foot of Naini Tal hills. From Kathgodam, by pony to Ranikhet, thirty-nine miles; to Machkhali, eight miles; Somesar, fifteen miles; and on to Bagesar, sixteen miles. The best fishing is about seven miles below Bagesar. There are dāk bungalows with khansamas at every march. Good sites for tents down the river from Bagesar village. Pagela is six miles and Ason ten miles distant. The best months for fishing seem to be April and May. The fish are Mahseer, and they run from 5 to 20 lbs. The average is, however, about 8 lbs., but there are fish of over 30 lbs. weight in this river. The best way to fish is with a spoon from the bank. No boats, wading only occasionally necessary, the river being deep and narrow, with very heavy runs. There is much climbing over rocks from one pool to another. Fished with single gut traces and 1½ inch gold spoons. With a small flying spoon, smaller fish were

caught. The river is unfordable, but easily commanded with a 16-foot rod. The water is very bright and clear in May. Best time to fish seems to be up to 11 A. M. and after 4 P. M. In many places the forest comes right down to the water, and casting is difficult. Don't fish at Bagesar itself, as the natives are constantly fishing there. Up stream about three miles are some good pools, but my advice is to go at once right down the right bank of the river to village Pagela, six or seven miles by pony, along the Almora road for the three miles, and then the road goes up a ravine to the right, but the path to Pagela keeps along the bank of the river very high up; a pony cannot be taken, as the hills are very steep. River is inaccessible till Pagela is reached, which is the first village after leaving the road. Here descend to river, where some level places for camping can be found. There are splendid runs here and for four miles down. No supplies, but milk is procurable. The forest is dense, and of pine and oak. The nights are quite cool at the end of May. The altitude of Bagesar is over 3,000 feet. Coolies are required for baggage, and riding ponies are obtainable at Naini Tal and Ranikhet.

44.—*Fishing in the Kosi River, Kumaon, by* CAPTAIN W. T. FAIRBROTHER, *13th Bengal Infantry.*

District Kumaon, Sheet No. 66, S. W., Atlas of India. The fishing is about forty miles from Naini Tal, and about the same distance from Ranikhet, *viz.*, to Kumeria, where the Ramnugger-Ranikhet cart-road crosses the river. The river is the Kosi; the best way to reach the water is by the cart-road from Ranikhet to Ramnugger. This road crosses the rivers at the best places for fishing—Naini Tal to Ranikhet is two marches. Richee, fourteen miles; Machor, twenty-seven miles; Kumeria, thirty-four miles; Mohan, forty-one miles; Dikuli, fifty-one, and Ramnugger, fifty-six miles.

There are road bungalows at Richee, Machor, and Kumeria. There is a forest bungalow at Mohan; one must camp at Dikuli. No supplies are obtainable, even milk is only procured with

great difficulty. The bungalows are furnished, but there are no servants. Permission to occupy them is required from the Executive Engineer, Military Works, Ranikhet, or the Conservator of Forests, Kumaon Division. The best time of year for fishing is April, May, and part of June, but the heat in May and June is excessive. The fish are Mahseer, and run usually from 2 to 4 lbs. Fish of 5 or 6 lbs. are often caught, and although they run up to 20 lbs. or more, and are very plentiful, they are seldom caught of this size. The best way to fish is with a small spoon and fine tackle. A 14-foot rod easily commands the river; wading is necessary. The river is generally fordable; no boats are procurable. The best part of the river is from Kumeria to Mohan five miles, and then to Girjuya or Dikuli five miles. There are good runs every few hundred yards. There are some splendid pools at Dikuli full of big fish, and the Commissioner's pool at Girjuya is preserved from netting. Fish in the middle of the day in cool weather, and early morning in May and June.

The Kosi River rises in the hills behind Almora, and flows south-west. The Naini Tal and Ranikhet road crosses it at Khairna, and small fish, up to 2 lbs., can be caught here; the best pools are below the bridge. From this for many miles down the river is unfishable, there being no good pools. There is one pool at Battleghat, and at long intervals down the river.

The best part of the stream is from Kumeria to Dikuli and a few miles below, the latter being the best place. Here, early in May, all the pools were full of fish, the water was quite clear, and the fish visible in thousands, and 20, 30 and 40-pounders were jostling each other like tame fish, but it was impossible to entice them to take any kind of bait. Natives are not allowed to fish here in the Commissioner's pool, which is right under the road. Military cart-road from Moradabad to Ranikhet by Ramnugger crosses the road by a suspension bridge at Dikuli; it then leaves the river for five miles, and again crosses it at Kumeria. The river does not receive snow-water, it is only a small stream at Khairna, but has more water at Kumeria. It is

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easily fordable everywhere. Good shooting can be obtained in the reserved forests at Kumeria and Mohan, for which permission is required. Jerao (stags), kakur, pheasants, and jungle fowls are numerous. Gooral are to be found higher up at Machor. It is very hot at and below Kumeria, being only 1,000 feet in altitude, but it is cold at Richee and Machor, which are about 6,000 feet above the level of the sea.

A map showing the various fishing localities in Kumaon, and which has been kindly prepared by Captain W. T. Fairbrother, is herewith given.

45.—*Fishing at Malwa Tal, near Naini Tal, Kumaon District, by CAPTAIN G. MASSY, Norfolk Regiment. 1895.*

Malwa Tal is in the Kumaon District, about sixteen miles from Kathgodam railway station on the Rohilkand Kumaon Railway.

The best way to reach the lake is by road from Kathgodam first to Bhim Tal which is about nine miles and then seven miles on to the Malwa Tal.

There is a bungalow there with complete furniture, and a khansamah during the summer months: there are also good sites for tents near the bungalow.

The best time of year to visit the water is in April, May, June, and after the rains till October.

The fish to be caught are Mahseer and run up to 40 lbs. or so in weight. Average size about 2 lbs.

The best way to fish is with fly from a boat, fishing round the edge, under overhanging bushes, rocks, etc. Fishing from the bank, except in a few places, is almost impossible.

Best flies appear to be "Tag of towel," Claret fly, Silver Doctor, Cockey-Bondhu, white moth and a fly with yellow body, dark tail, brown hackles and yellow Mallard's wings, the two latter always seem to take. The yellow fly is something like a small blossom, which sometimes falls on the water, and which the fish eat readily.

The cast used should be fine. The best time to fish is when there is a good ripple on the water, and the fish seem most on

the feed between 10 A.M. and 2 P.M. The large fish do not take a fly, and the natives say that the largest taken that way is 10 lbs., which I should fancy is unusual.

The only way to catch the large ones is with live-bait, or by trailing a spoon or natural bait behind a boat. The best way to catch them with live-bait is to have a second rod ready, and when the breeze drops or before it begins (about 10 A.M.) to put on a live-bait, and try where the river comes in at the top of the lake. Single Salmon gut with one hook through the lip of the bait appears to do well. There are some nice pools for a short way up the river.

Between 10 and 2 in the day, the fish are mostly near the surface and can be easily seen; the best plan then is to drift quietly up and cast the fly lightly just in front of a fish's nose; if he does not see the gut he is almost certain to take it, but they are very quick in spitting it out again. In the hills round Malwa Tal are a fair number of Jerao, Serow, Kakur, Gooral and Kallige Pheasants.

Three boats are kept on the lake, the charge for them is 8 annas a day. Boatmen can be got at the village, the two best being Kewal Sing (the chowkidar) and Kishna. Supplies can now be got from the khansama, and if he runs short, from the dāk bungalow at Bhim Tal. There is a post office at Bhim Tal, and letters are brought on by a village postman to Malwa Tal.

N. B.—A most excellent book on angling in the lakes of Kumaon has recently been brought out by Deputy Surgeon-General Walker, a member of the Fishing Club. The book is a most interesting one, and all anglers, young and old, would do well to peruse it.

46.—Fishing near Mirzapore.

An Extract from The Asian of 2nd September, 1879:—

"In most localities, it is quite out of the question going out in July, August, and September. The rain is one hindrance, muddy water another, fever, etc., a good third. The consequence is no one ventures out, except perhaps once or twice during what

should be 'close' time. The only true fishing months may therefore be confined to October and November, and from February to the rains.

First, then, Mirzapore is the railway station, and thence some twenty-five miles down the Rewah road is a dâk, or rather a road bungalow, to which, whilst I was stationed at Mirzapore, the courteous Engineer never refused entry; supplies and servants must be taken, as no establishment is kept; permission to occupy the bungalow must be obtained. In the hotter months and rains the shelter is a necessity; and in the cold weather tents are preferable. The river, the Beylun, is about 300 yards from the bungalow, and the best fishing is just above and just below the bridge, an 'Irish' one. Here, on 11th October, my diary reminds me of the capture of a full 12 lb. fish, and with the recital I give the description of two flies used before the Mahseer was landed.

It is four years ago now since I first camped at Buroundah, where the road bungalow is. The river had just cleared, and my bag, with a medium-sized fly, yellow all round except a black feather tail, was three good fish, the largest scaling $3\frac{1}{2}$ lbs. This was encouraging, because I had been told I should get no fishing in the district. I changed my fly for one of a larger size, with a dark blue body, broad silver tinsel, no hackle, wing of peacock harl and ruffed with buff-coloured silk. Three pools below the bridge I was into a good fish, but after the first rush the line came away slack. He had gone; quite a yard of good stout salmon gut and a good fly lost. It was late, so we (a friend had joined me) went back to camp.

Next morning we shot. In the evening my double-handed trout rod, a beauty, with treble gut, was sailing a fly over the first pool under the bridge. The fly was a large one, as I now knew heavy fish were to be got, but until close on dusk there had not been a rise. Three good pools fished from both banks resulted in blanks, but I sat down and chose a fly as nearly as possible similar to the one I had lost, and soon felt myself safe in something good. I shouted with joy, and my chum S. soon came up. We had to light a lantern, and by its aid at last I landed

my first, and, alas ! my last 12 lbs. in the Beylun. Unhooking him, we found the fly he had carried off the day before firmly fast in him, and the gut trailing. I have never seen such a thing happen before. It was rather curious, too, that a fish should, after being struck the day before, remain about the same rapids ; but I am one of those who do not believe the finny tribe are very sensitive about the mouth. I wish I could give coloured plates of the flies that are killing, but I cannot even draw. From Buroundah we returned to Lallgunj, and here a pretty fair bag of trout rewarded us. The little stream is 'little indeed.' Sometimes almost running dry, but half-pound trout on a very light Castle Connel rod was not bad fun, and over six brace was our reward.

Let us return to Buroundah. The rapids below the bridge end in a very deep pool and long one, full of alligators, but if you have time follow it down, and you enter the Allahabad district—famous for pig sticking, good for gaiety, and noted for a charming club and a charming secretary. Many runs have I had with him. I would they could be multiplied indefinitely. But in those days we had a collector. The glory is departed ; yet in good hands Allahabad will still show sport ; I believe now is showing it.

I have sadly digressed. As I have said, go below the big pool under the rapids of Buroundah, and from thence to Pathurpore near Koolsara. A 1 fishing, but the water must be clear, and the angler keep well out of sight ; dark flies are the best, and I always used them. Let me describe one that will take splendidly. But why should I ? 'The Rod in India' has christened it the Blackamoor.

Then, again, we are now in the Allahabad district, Sohra to Khurkha is splendid fishing ground the whole way, and there is a place I do not quite remember, but think it is called Mai, and is close to Kohrar ; here I caught my best fish in nearly still-water, fishing just the break of the rapids ; all these places are best reached, I think, from the wayside railway station of Sirsa. Any friend in Allahabad could give information. The Beylun

joins the Tons, and the fishing from Sohra to Khurkha and at Mai is on the Tons. In this latter river I was indebted to a brother sportsman for one of the best flies I ever threw. We had to make them up, and he showed me how.

"Body Austrian grey, silver tinsel, tail of two bustard feathers and wings of the same. It is a splendid fly, and I am much indebted for good sport to my friend. Here my experiences of Mirzapore and Allahabad end."

"DOON."

47.—*Fishing near Jubbulpore, Central Provinces, in the Nerbudda River, by G. H. LACY, ESQ.*

The fishing is from 6 to 12 miles from Jubbulpore in the Nerbudda River. The best ways to reach the water are as follows:—(1) To Bhera Ghât (Marble Rocks), 11 miles, by riding or driving. (2) To Lumheta Ghât, 8½ miles, by riding; can drive, but with difficulty. At Bhera Ghât, there is a dâk bungalow and plenty of room for tents. At Lumheta Ghât, there are several very good and pretty places for camping. (3) By driving or riding to Goaree Ghât, six miles along the Nagpore road. (4) Out to a Ghât, name not known, by following a path which leads out behind the European Infantry Rifle Range—distance 5½ miles. The fish are Mahseer, and average from 1 to 10 lbs. There is only one way, that is really successful, of fishing the Nerbudda, and that is by means of parched gram or "chunna;" two or three grains of which are threaded on a hook, and used something after the manner of a fly. It is necessary to have the place intended to be fished ground-baited with this "chunna" for a couple of days beforehand. A very fine running line, 60 or 80 yards, a little single-handed fly-rod, a fine gut cast and a single hook, about the same size as those used for perch fishing at home, are required. The "chunna" has to be prepared beforehand, and each grain has to be bored through, for which purpose a three-sided needle is best. The finest and largest grains should be picked out for baiting. Two of these are slipped on over the loop of the

length of gut to which the hook is attached, and they slip down the hook until caught by the bend, one grain resting on top of the other. Two grains or three may be put on in this fashion, according to the size of the hook. Artificial grains of wood painted yellow to represent the real thing are often used, and do fairly well, but very often the real grain will take three or four fish without breaking, and it is not very much trouble detaching the hook from the cast to re-bait. The way to commence fishing is to proceed to the head of the rapid to be fished and cast in a handful of the "chunna." This will attract all the fish, and with the second handful thrown in, the real bait should be cast in with it. It is at once taken and the fish rushes off. It will be found that the fish, after three or four are taken, gradually recede down the rapid, as landing each successive fish disturbs the water below. Very often a good fish or two is taken when the rapid is played out, in the pool at the bottom—but seldom more than a couple. The larger fish lie just at the end of the rapids. The clearer the water and the hotter it is, the better the sport. April, May and October are the best months. At Lumheta Ghât, there are two runs, one above and one below the village. Also between Goaree Ghât and Lumheta are several good places. The rocks being apparently of volcanic origin, the whole river is full of sharp ridges and scoriated projecting rocks, and very often the fine gut cast used is cut like a knife, by fish running in and out among these rocks. A landing net is very useful and should always be taken. The morning seems the best time, but it is of no use commencing until the water has been warmed up by the sun.

47A.—Fishing near Jubbulpur, by DR. CRETIN.

The fishing is done with gram chiefly, as described by Captain Lacy. The water must be clear, and you must bait the places for a week. The best way to bore the gram is by means of a small drill sold by Luscombe of Allahabad under the name of "gram-borer." Any mistri could make one. The fish are small, ranging up to 5 lbs., mostly. Very few ten-

pounders are caught. A twenty-pounder is a curiosity. They will also take a small spoon, 1 to 1 $\frac{1}{4}$ inch, when the water is not clear, one can do bottom-fishing with *atta*, ber, melon, oil-cake, etc.

Gaur River.

1. On the causeway five miles on the Mandla road. Fish about 1 lb. One can use gram or a spoon.

2. Above and below the waterfall, two miles below the causeway, they run up to 5 lbs. Use gram or a spoon.

Nerbudda River.

1. At Kerani Ghât, three miles from the causeway, the Gaur joins the Nerbudda.

(a). There is a big pool of still-water at the junction, where one can trail a dead-bait from a boat. Fish up to 10 lbs.

(b). A mile above the junction, there is a run with fish up to 5 lbs. Use gram.

(c). A few hundred yards below the junction, there is a powerful rapid, where one can spin from the bank. There is also a back current, where one can use gram.

2. At Goarighat, five miles on the Nagpore road, where the katcha bridge is during the dry season, there are three places. Fishing from the ghâts is forbidden.

(a). On the bridge with gram, up to 5 lbs.

(b). One mile down near the rock at the bend of the river, fish with gram. You occasionally can have a ten-pounder there.

(c). Three miles from the bridge down the river there is a run, where you can spin a spoon. In the hot weather, when the water is low, one's boat can be anchored to a rock at the head of the rapid. Trail a spoon in going to and coming from, the place.

3. Tilwara Ghât, five miles by pucca road to Garha, thence three miles by katcha road. The fishing is at a rocky bank on the other side, at the head of the big pool. Try gram first, then *atta*, then trail a spoon from a boat in the big pool. There are 10-pounders to be caught.

4. Lămheta Ghât, five miles to Garha, thence seven miles by katcha road. There are three places :—

(a) Trail up the river, until you reach a powerful rapid one mile up, where you can spin from the bank. In coming down, try gram. You can usually catch "batchwas" with cockroaches or other insects, and they give good play.

(b) Immediately below the ferry at the temple, there is a run where you can fish with gram.

(c) Below the temple itself fish with *atta* and oil-cake (cărri); there are 12-pounders there, but they are very fastidious.

5. Marble rocks (Bheraghat) twelve miles by road, through Garha. There is a railway station three miles from the marble rocks.

(a) Above the waterfall, not good.

(b) In the gorge below the waterfall, difficult of access.

(c) Between the marble rocks themselves. There is an English boat requiring four boatmen at eight annas, plus one rupee for the boat. One can spin going up and coming down, also at the head of the pool by anchoring the boat to the rocks. Gram also can be used there. The fish run up to 10 lbs., with an occasional 20-pounder. Fresh water sharks abound.

(d) At the landing place below the bungalows, in October and November, there is a good run at the bathing-ghât there. Both gram and spinning can be used. The other bank is better still, especially in the hot weather when the water is low. The fish run up to 5 lbs., with occasional

- 10-pounders. They are simply voracious during the first showers of the monsoon, before the water has become discoloured.
- (e) Use gram at the head of the big pool quarter mile lower down, and trail a spoon in the pool itself.
- (f) The boat will stop at the end of the big pool owing to shallow, rocky rapids. Try the latter with gram for a short time. Then go 500 yards lower down where the rivers narrow between rocky banks. This is a very good place. Both gram and spinning are effective. For the latter you must wade up to your knees. Freshwater sharks (Páráñ) are numerous.
- (g) At the Railway bridge.
- (h) Near Burghi, fourteen miles on the Nagpur. You cross the Nerbudda at Goarighat. There is a dák bungalow and shooting also. There is a pool in the Tamar one mile off, and a run in the Nerbudda below the junction of the Tamar, two miles off.

Hiran River.

The Hiran river does not get clear until late in November, because it passes through a cultivated tract, has muddy banks and bottom; and the water from the rice fields are emptied into it after the cessation of the rains.

1. Hargarh, by rail to Sihora, the second station from Jabulpur; thence four miles by pony tract to the village of Hargarh, they do not go beyond 5 lbs. One mile from Sihora station, at right angles to the line of rail, is a pool where one can fish with gram and paste.

2. Ganiarighat, seventeen miles along the Damoh road to the village of Bhiloda, thence three miles by katcha road. A *jhil* is in the way of carts, and is impassable until its banks are dried up. There are four fishing places:—

- (a) At the head of the big pool immediately below the ghât, not good.

- (b) At the end of the pool one mile down, below a ledge of rock going across the river, this is a good place.
- (c) A little lower down where the river breaks up into many channels, not good.
- (d) A mile further down near a fortified looking place, this is the best place.

3. Kákārheta, nineteen miles along the Damoh road to the village of Sohari, thence across country for three miles to the village of Kákreta. Carts can go in the dry time of the year. There are three fishing places :—

- (a) Near a perpendicular rock called “Nahun Debi.”
- (b) At a run below this pool.
- (c) At the head of a second pool, below the village of Cawnia on the other bank. This is the best place when the water is at its lowest, because all the fish are driven into this pool, and a bund is built across the river to prevent them getting out. You must fish before they begin netting. There are many five-pound Mahseers and big fresh-water sharks.

Mahanadi River.

By rail to Chandia *viâ* Katni. Tents and provisions required. Camp near railway station. Go back along the line to the Railway bridge, there is a run there, another is one mile higher up the river, a third two miles higher up. This river has a rocky bed, passes through a forest, and clears up very rapidly after the rains. It is fishable in October, if the rains have stopped. The fish run up to 10 lbs. This river drains into the Ganges.

Tons River.

It flows into the Ganges. Go by rail to Maihar, where there is a dāk bungalow and a railway bungalow. Tents and provisions required. Write beforehand to the Diwan of the Rajah of Maihar to provide you with carts, coolies, and elephants. Go

three miles along the pakka road running at right angles to the railway line, down to the bridge on the Tons. The Raja has a pleasure garden there with a boat, which is unable to go below the bridge when the water is shallow. Camp near the bridge. Walk down the course of the river on the left bank, two miles to the village of Dulmi. The river makes a bend here, with a series of rocky rapids extending over half-a-mile, until it turns again sharply. The beginning and the end are the two best places. Spin, as the fish are not accustomed to gram. In the pool above the bridge try *atta* from the boat.

There is Mahseer fishing about twenty miles from Riwah on the same river Tons. It is a native state, thirty-two miles by dāk from Sutna railway station, on the line between Allahabad and Jubbulpur. The Resident lives at Sutna.

Tanks.

There are numerous tanks near Jubbulpur, many of which abound in Rohu and Marral. As a rule, the natives object to your fishing in them.

Waterworks.

Jubbulpur is supplied with water from a large artificial reservoir situated six miles off, and fed by a small stream. It forms a species of inland lake, and abounds in Mahseer up to 5 lbs., which are growing bigger every year. They take a spoon greedily. Occasionally a Murrall or a Garfish is hooked. It can be fished during the rains by trailing a small spoon, as the water remains clear, when all the rivers are muddy. The best place is from the overflow up the farther reach. The boat must go along the banks. A pass from the District Engineer is required for the purpose of visiting the waterworks, but the boat cannot be used. The road is drivable, and passes through the British Infantry Bazar. Fishing with baits that are liable to contaminate the water, should not be allowed. But the use of a metal spoon or of an artificial fly need not be forbidden, because the fish require to be thinned out, on sanitary grounds.

A few specimens of the dark variety of Mahseer are found in the reservoir.

49.—*Fishing near Nowgong, by DR. CRETIN, 1895.*

There are several large sheets of water, where fishing can be got; you can drive to all the places. Jagat Sagar is three miles from Nowgong, but contains small fish only, which can be caught with a worm or a shrimp from the bund.

Gora Tal is about eight miles off, and contains Rohu of fair size. Fish with paste.

Chharkari is forty miles off, and contains freshwater shark (Paran). Fish with live-bait and wire. You can go to Mahoba by rail, thence by elephant ten miles to Chharkari. There is a fine furnished guest-house on the water. Supplies and everything else can be got at Chharkari. Arrangements can be made at Nowgong through the Political Agent.

Mahoba can boast of immense artificial lakes abounding in fish. There is a dāk bungalow. Mahoba is on the Indian Midland Railway.

50.—*Fishing near Jhansi and Gwalior, Central India, by G. H. LACY, Esq.*

Burwa-Sagur tank near Jhansi, thirteen miles out. Good road. Excellent dāk bungalow and good sites for tents. Visited with success in March. Fish are of all sorts, Rohu, Tengra, etc., up to 10 lbs. Best way to fish, with worm or *atta* from the bund. Boats called dug-outs are procurable. Morning and evening best time. A landing net is very useful. Many kinds of small fish up to a pound or two are taken. In the Pahooj river, about five miles down the road from Jhansi to Sipri, bags of Indian Trout can sometimes be made, as also in the Barbery nullah. In the Betwa there is excellent Mahseer fishing, and there are several places near Oorcha that are good, and also near where the Lalitpur road crosses the river near Bubeena. In the Scinde river near Sipri there

is a fair number of Mahseer, and also Trout; and great numbers of Murrel. Also in the Parbatti river, three marches from Gwalior, and half way between this place and Sipri, at Mohona, Mahseer fishing may be had, and near Gwalior itself, fishing may be had in the River Sark between Nurabad and Koolet, at which latter place there are great numbers of tame fish preserved by the Maharajah. At Nurabad itself, excellent bottom fishing is to be had, and the fish also take a fly; and many kinds of miscellaneous fish can be taken. Nurabad is fourteen miles from Gwalior city, along the Agra road, and there is a good bungalow, furnished. The fishing is chiefly near the old bridge over the Sark, which is a few hundred yards north of the bungalow. Under the arches of this bridge are a lot of fish, and they take a worm at times very freely, as also a fly, no matter of what description. Nurabad is an excellent place for bottom fishing.

In September, 1881, a friend and myself took over 90 fish in one day, running from a few ounces to four to five pounds. Right under the southern arch of the bridge used to be the best place. The River Morar also affords excellent Trout fishing just above the old cantonments.

The above account was written some years ago, so that it is not known if the fishing in these parts is as good now as it was then, but there is every reason to believe so.

51.—Fishing near Jhansi.

Extract from THE ASIAN of October 14th, 1879.

“The next district I touch on is Jhansi. It is a fine sporting district; deer, hares, grouse, and ducks are plentiful. Snipes are not very plentiful, but still they are to be got with a little trouble. Leopards are very numerous, but owing to the rocky nature of the country not easily driven, and very wary. The fishing is excellent.

I am not quite certain of the distances, but the Pahooj river runs about three miles from Jhansi, and holds some of the finest trout I have ever seen. The Babarie, about four miles on

the opposite side, almost beats it, and the Betwa and Dessaun give fine Mahseer.

Everything, however, in these streams, must be taken at the tide.

The Betwa and Dessaun are raging torrents till October, and then you must be down and get all you can of fishing or the streams simply dribble, and still-water fishing is all that can be had. The Babarie and Pahooj clear rather rapidly, especially the former. And I hardly know prettier trout-fishing than the Babarie affords. As both these streams are minor ones, the best fishing is to be got in a break of the rains. I used always to go past the cavalry lines, through a gate in the custom's hedge, and down to the stream where it cuts the Oorcha or Tehree road. Fish down stream. You get splendid fun. Do not despise the water because it is rather sluggish at places, and does not look deep. Lower and about four miles from Jhansi off the Burwa Sagar road, is the best and deepest pool; but though there are numbers of fish in it, I do not remember ever to have taken there one good trout. No reason why others should not; but it was puzzling.

Oorcha, the ancient capital of the Raja of Teekumgarh or Tehree, has a wall old and broken, in parts made of loose rocks and boulders piled up, and I fear to say of how many miles in circumference. It is seven miles probably. A Gazetteer would simplify matters. The rains are grand. Here we had many a merry party and many a jolly day. The Betwa runs close under the old temples, and fish are fairly numerous, though I have never seen one above 8 lbs. The rapids are splendid, and there is a dam below the old city which was once unbreached, but has been neglected, and now has one or two rifts in it, and the waters pour through in wild disorder. Many a good fish have I taken there.

Most successful was a fly I describe now. Body orange wool, gold twist, yellow tail and yellow wings, with a taste of red on the shoulders. It is very killing.

Another—body dark yellow, tag of peacock harl, wings

black with a few peacock harl in it. I found, however, bright English Salmon flies take well too.

Then the country above Oorcha is splendid. The scenery all the heart could desire, and the Betwa winds through forest lands now one united stream, and now through several channels, sometimes clear of trees, and more often bordered by them thickly. Fishing is grand, and so is it all on to the bridge over the Jhansi and Lullutpore road. I would like once again to camp up the Betwa's banks from Oorcha to the bridge on the road, and fish the old pools; just above the bridge, too, is one of the finest pools in the river. It is a still pool, and requires fishing, but has given good sport. I have given no fly for the Pahooj or Babaries, but here they are, and I am indebted to a knowledge of the first to a friend about those parts :—

1. Body red, silver twist, wings black, tipped with white (the common Myna will furnish this or the Turkey), hook rather small.

2. The red spinner.

3. The black spinner, with silver twist. I found gold twist answer too.

The above are probably the best flies, but there may be others. My experience of Jhansi dates only over a year. There are others there who, if they would, could give better information. Then the Dessau; I hate the river; there are lots of fish in it, though I do not think so many as in the Betwa, but I never could get a bag out of it.

The ghât off the road from Jhansi to Nowgong, about thirty-eight miles from Jhansi, and fifteen or so from Nowgong, is the place I would choose to try my luck. From thence one can fish some rapids about a mile and a half down stream, and some two miles up stream, besides what fishing one could get immediately above and below the ghât itself. Very fine trout are to be had above and below the cold weather bridge. There is a good pukka road from Jhansi to Nowgong, and on both banks of the river bungalows, permission to occupy which has never, to my knowledge, been refused.

Then there is Mow, near Raneepur, about thirty miles from Jhansi, and eight miles from the ghât. You must pass Mow, if my old friend will let you get to the ghât, and there, though there is a dâk bungalow, with a 'call' or without one, the chances are you will not be allowed to occupy it, but be most hospitably entertained and welcomed by as goodhearted a man and as jolly a sportsman as ever stepped. What is more, he would beat most fellows into fits with a gun, and just pride himself as showing you the best sport to be had all round his place, so one cannot do better than visit Mow, if thereabouts.

Chirgaon is about eighteen miles, if I rightly remember, from Jhansi, on the Jaloun road. There is here a road bungalow, but the good fishing ground on the Betwa, which is about three miles from Chirgaon, is at and about a place called Goolara, some three to four miles on the Jhansi side of Chirgaon.

The fishing from Goolara to Dhunna is magnificent, but you must 'tent' it, and remember, that though your 'rises,' and probably 'takes' will be numerous, the fish will very seldom exceed 7 lbs. I do not remember ever trying spinning, but from what I saw of fish in the pools from high bank, my impression is, they do not run to any greater size in the rivers of Jhansi and Lullutpur than 12 to 15 lbs. My experience of these districts is respectively about a year each, and therefore I am open to correction, but I think that the instances of fish caught over 10 lbs. (Mahseer) are rare. But after all, there is more fun and greater enjoyment in playing a 10 or 6 lbs. with a light rod and fine tackle, than working and worrying on for a big fish with rods and tackle, that might be described as Piscatorial Woolwich infants. No more now from yours

"DOON."

52.—*Notes on Fishing near Darjeeling and in the Western Dooars*, by E. R. DURNFORD, 1895.

Fifteen years ago it was generally believed that no fishing was available within a day's journey of Darjeeling, such however is by no means the case, and I have had good sport both on

the Rungeet and Teesta River, distant about twelve and eighteen miles from the station. About the middle of October and early in November, fish may be caught. A "fly" spoon $1\frac{1}{2}$ inches silver and copper I have found best, and fishing "fine and far off." After the first few days of November, the water becomes very cold, rendering wading anything but pleasant, and quite putting fish off their feed. The best sport, however, I have had has been in March and early in April before the melting snows from the hills above discolour the water. A 20-lb. fish is uncommon on the Rungeet, though I have caught them of that weight, and have had capital sport with the locally called Cutlee, of which I believe the correct name is *Barbus Hexartichus*. They run up to 6 lbs. or more; closely resemble Chub, and give splendid sport, fighting far more gamely than Mahseer, and never attempting to sulk. The best portions of the Rungeet, as I have found it, are adjoining the Singla Tea Garden below Tukvar, and again about a mile above the bridge below Badamtam, fishing from the Sikkim side of the river. The Badamtam "Government Rest-House" is most handy for this, friends of mine staying there on more than one occasion having had capital sport. Cutlee may be also caught in the "Little Rungeet," which joins its greater brother at Singla, and here they often as in other rivers take a grasshopper capitally, the large green kind, though I have but seldom tried their bait. Dynamite and netting have much spoiled this river, I believe, of late years.

The Teesta holds grand fish, but is on the whole an unsatisfactory river to fish in its upper portion, on account of the colour of its water; the best way to fish this from Darjeeling is to go *via* Parhok or Badamtam to the bungalow at the Teesta bridge, about eighteen miles from the station. A mile or so above the bridge, the Rungeet and Teesta join, and here is a splendid pool full of good fish. I would discard the fly spoon here, and use a wire trace or *good* double gut with a $2\frac{1}{4}$ or 3-inch spoon, all silver, throwing off the reel in the Nottingham style if possible—a method I strongly advocate for spoons. The reel should of course have a "check" to be applied at will on the bait touching the

water. Another rest-house "Riang" is some six miles below the bridge, another at Kalijhora, eight or nine miles farther on, opposite which is a good pool, then on to Sivok six miles, and here the river enters the Plains--Dooars on one bank, Terai on the other. At Sivok a ferry boat is in use, and can be always obtained for an hour or two, it should be taken up to the head of the pool, the whole length of which may be fished over. Clear water is the difficulty. If this can be obtained in March, grand sport may be had, and the river successfully fished right down for many miles below Sivok in the Western Dooars. All silver spoons, I think, are best in such deep water as is here, also in the Dooars portion of the river.

WESTERN DOOARS.

Jaldacca.—This river comes down through Bhootan, and passes some two miles from Ramsahai station in the Dooars. It has deteriorated woefully within my memory owing partly to the constant netting, partly to the use of Dynamite cartridges which the Nepaulese seem to have no difficulty in obtaining from the P. W. D. and other road-making officials. Some seven years ago it was all that could be desired, and I had fine sport with Cutlee and a $1\frac{1}{2}$ inch spoon, fishing as with a fly, high up in Bhootan. I consider it an essentially good Cutlee river; the best pools are at or near Sipchee and from this downwards to Baman-danga near the Ramsahai station. A tent should be taken to camp at Sipchee, and it is advisable to pitch the same within British territory.

The Torsa.—This is another river, flowing down through Bhootan and lies about thirty miles east of the Jaldacca. The nearest railway to it, the Bengal Dooars, stop at present at Ramsahai two days distant (thirty-five miles) from the river, which is certainly inaccessible without a friend to help with coolies and ponies. I have obtained the best sport high up in Bhootan some five miles above British territory. If camping, it is unwise to camp out of the latter. An elephant is invaluable for crossing and recrossing at will, but capital fishing is of course to be obtained without, and a

boat is not necessary. I have used the "fly" spoon $1\frac{1}{2}$ -inch with success, but prefer large spoons about $2\frac{1}{2}$ inches, all silver, and strong traces used off a "Nottingham" reel. I have just (March 1895) returned from this river, five days fishing (two rods) yielding a bag of 355 lbs., largest fish $39\frac{1}{2}$ lbs. caught on $2\frac{1}{2}$ -inch "Luscombe" spoon, all silver. I had better sport in a former year. A friend then with me, Mr. Stewart, a most enthusiastic and skilful hand, hitting a fish of 46 lbs. and it may be worth mentioning here that the tackle used was a large spoon and old gimp trace used by myself nineteen years ago when a boy at Eton! Other rivers to the East of the Torsa are the Raidah which I have not seen, where good fishing should be obtained.

The Sunhos, bordering Assam, a large river containing I have heard heavy fish, and there are also small rivers near the B. D. Railway, the Neora Mal Chee and *Gish*, but they only hold Mahseer during the rains, at least as far as I am aware of.

53.—*Angling at Darjeeling.*

That the rivers contain fish is a fact known to most of the residents, but that they are possible to be caught on a rod, is, I believe, not so generally known. It would be little good here for me to refer to fishing in rivers far from Darjeeling, so I will confine myself to those close at hand, or comparatively so.

Fishing may be had in most of the rivers in the district from March to December, and I have little doubt that fish could be taken in a few of the medium sized ones in January and February with live-bait. Those which I should recommend as easy of access and close to Darjeeling are:—The Teesta, Rungeet, and Raman, and small streams, the little Rungeet and Rungnoo. The best months for fishing the Teesta, Rungeet, and Raman are from March to May and from October to December; those for the small streams May to October. Of course, as every Indian Angler knows, these rivers cannot be fished successfully unless perfectly clear, (in which way they differ from the rivers in the old country). On this account the Rungeet, Teesta, and probably the Raman are unfishable during the rains, whereas

the smaller streams clear so quickly that they are fishable very often at that time, and hold the largest fish then. The size of the fish is generally in some sort of proportion to the volume of water in the river.

The tackle necessary for the three large rivers mentioned, is a double-handed trout rod 12 ft. to 16 ft. with standing rings; 100 to 200 yards of plaited cotton, Patent American or Tussur line; a good strong reel (not necessarily large)—

Six $4\frac{1}{2}$ -feet double gut Mahseer spinning traces, with two swivels.

Three $4\frac{1}{2}$ -feet treble gut Mahseer spinning traces, with two swivels.

Three single gut 6-feet spinning traces (for small streams).

Three $1\frac{1}{2}$ -inch hogged silver and copper spoons with single flying mounts.

Three $1\frac{1}{4}$ -inch hogged silver and copper spoons with single flying mounts.

Three $\frac{3}{4}$ -inch hogged silver and copper spoons with single flying mounts (for small streams).

(Spare mounts should be got and all spoons mounted on strong split-rings).

No landing net or gaff is necessary, as fish up to 30 lbs. are easily landed by your attendant hitting them a smart blow on the back of the head, after which they will scarcely move. Another way with Mahseer and Cutli (the two fish most commonly caught) is to get behind the fish and gently slip the forefinger and thumb along the back until they are inserted in his gill, when he generally allows himself to be lifted out of the water without trouble. I have landed a fish of 8 lbs. in this manner without any assistance, and holding the rod in my left hand. Care should be taken, however, not to hook the finger in the gills when doing this, as both these fish are possessors of very formidable throat-teeth which are capable of immense crushing power.

Fishing with the fly-spoon is, I think, much more satisfactory than the underhand casting of large spoons, which, I believe,

is only practicable in rivers as large as the Teesta. My favourite size of fly-spoon, and one which I find most killing in medium-sized rivers like the Raman, Rungeet, etc., is $1\frac{1}{4}$ inch in length and heavy. I get these made out of a double pice, by a Nepalese blacksmith and solder the outside so as to make it silvery.

From September to January, beside many of the rivers on grassy flats, a very large green grasshopper is to be found. I am convinced that twice as many fish may be caught by using it on a $1\frac{1}{2}$ -inch flying mount than by using a spoon or live-bait of any other kind. The insect is a bright green with red posterior wings, and measures about four inches in length. The lower hook of the mount should be inserted in the abdomen on one side and the barb brought out at the anus; the upper hook will then be found to come in position to be driven in behind the thorax. The mount should be tied on, with a thin piece of twine, round the insect's neck, and the whole fitted on to a spinning trace and thrown like a fly. Cutli will come right out of the water at it in grand style, and will not hesitate, as they so often do with a spoon. This bait a friend and I used on the Raman near its junction with the Rungeet, in November and December last year, and found it very killing when spoon-fly would not tempt a fish. The fish caught with it ranged from $1\frac{1}{4}$ lbs. to 5' or 6 lbs. (the later at the junction), and the average size of fish was 2 lbs. I hooked a large Mahseer late one evening in this junction with grasshopper bait, but I unfortunately lost him after about a quarter of an hour through a treble salmon gut trace breaking.

Mahseer are not so often taken as Cutli, as the former feed nearer the bottom. Cutli is the Nepalese name for this fish, which belongs to the Carp tribe, and is nearly allied to the Mahseer (*Barbus tor*). The chief superficial difference between the two lies in the shape of the head which in the Mahseer is long and in the Cutli short and square. Cutli run to 10 lbs. or more I believe, but I have never seen one larger; Mahseer of course reach very great weights, 50 and 60 lbs. being not uncommon in larger rivers.

In my humble opinion Cutli are more difficult to land than Mahseer, both on account of their mouths being less fleshy, and consequently not giving such a good hook-hold, and when hooked they will often leap out of the water and rid themselves of the hook or "hooker" in doing so. They are generally landed sooner because they exert themselves so much in the final rush that they have little strength left for any more. A Mahseer's mouth is so fleshy that when once hooked he is seldom lost, if the tackle is strong enough. He seems to keep deeper when hooked, and is much inclined to sulk and give an occasional "waggle" of his head, which is often fatal to the best of tackle. I have never known a Mahseer leap out of the water when hooked, although I have seen them leap in still back waters on a hot day, and have successfully thrown over them when seen. The Mahseer is called Sahar in Nepalese, and has been compared to the Barbel of British waters. A friend of mine compares the Cutli to the Chub, which it seems to me also to resemble.

In order to fish the Teesta, it is best to stay at the dāk bungalow at the bridge, which is eighteen miles from Darjeeling. There are at least three good pieces of water between the bridge and the junction of the Rungeet. If, however, this is considered too far, the Badamtam dāk bungalow, which is eight miles from Darjeeling, is quite close enough to be able with a good pony from the Rungeet bridge, at the 11th mile to reach the junction of the Rungeet and Teesta by 9-30 A.M., starting from Badamtam at 7 o'clock. This bungalow is the most convenient place to stop at for fishing the Rungeet from the 10th mile to the junction (17th mile), and there are some very good reaches on the way. It is also convenient for the Rungnoo which is about half-an-hour's walk down through the Badamtam tea. To fish the Rungnoo a $\frac{3}{4}$ -inch or $\frac{1}{2}$ -inch spoon should be used, and having reached the bridge, I have found that to cross it, and go up the stream for about 100 yards to a shaded pool there, is likely to be productive of a $\frac{3}{4}$ lb. fish if care is taken to avoid being seen by the fish.

I cannot recommend the water higher than this, but there is a deep pool about 150 yards below the bridge, where a small stream (I forget its name) joins the Rungnoo, and in this water fish of 4 and 5 lbs. used to be at the end of the rains. This pool could not be mistaken sometime ago, as the over-hanging jungle on the opposite bank was decorated with my unrecoverable gut traces and spoon flies; out of this one pool, I managed to get eleven fish one evening averaging $\frac{1}{2}$ lb., and I hooked and lost two large fish. There are several good pools lower down, and the would-be angler must not be afraid to wade across constantly. The stream can be fished down to its junction with the Rungeet (above the new bridge and about three miles from the Glenburn bridge), and it is often quite clear when the Rungeet is dirty and unfishable.

The best rivers, however, for fishing at this time are the Raman (called by the Nepalese Rumbong), and that part of the Rungeet from the Raman junction to the mouth of the Jebi Kolah, using the green grasshopper before mentioned *par excellence*. Just above the Raman junction a sharp boy will soon be able to catch two or three large green grasshoppers (*tulo harigs patengra*, Nepalese) and with a clear river and bright day, a cast of well-baited hooks into the junction water with, say, twenty yards of line out, is certain to tempt a good fish. I will not guarantee that you get a fish at once, as I have lost many a one owing to the difficult water in this pool. Higher up the Raman, there are several good pools, and another rod and my own last cold weather often accounted for some nice sized fish there. Over one favourite pool I hear they have built an iron girder bridge to commemorate some of our captures. The Rungeet from Singla bazar (which is just below the Raman junction) is rich in water; where Mahseer and Cutli of large size have been taken. There is unfortunately no dāk bungalow near here, but the distance is not more than ten miles by road from Darjeeling, and the route is through Tukvar, Barnesbeg, and Singla.

Darjeeling News.

54.—*Fishing near Buxa.—Bhutan and Kuch-Bihar.*

There is very good Mahseer fishing in the Sankos, which is a big stream, and where the fish run very heavy. In the Rydak to the west the fish are five and ten-pounders mostly. To reach those places, you have to go on an elephant from Buxa or from Kuch-Bihar. The Buxa stream you can reach on foot from Buxa. Go down to Santrabari, two miles from Buxa, then turn to the right (west) along a footpath through the forest for three miles. You can get five-pounders there.

All those streams are very clear. They come from the hills and run through a primeval forest. The scenery is beautiful. A rifle should be taken for big game, while going through the forest on the elephant. Supplies and tents are required. One can go as far as Kuch-Bihar by rail. Thence to Buxa one has to use an elephant, which is usually lent by the Kuch-Bihar State.

55.—*Notes on Fishing in the Rivers near Darjeeling and in the Western Dooars, by "KNAVE."*

The Teesta drains Independent Sikkim, and forms the boundary between Darjeeling and Sikkim for some distance, until it receives the waters of the Great Rungeet. From this point to Sevoke and onwards as far as the civil station of Julpāiguri I have taken Mahseer, weighing from 50 lbs. downwards. At one time the Teesta, from the Angler's point of view, had an evil reputation; many had tried it and none succeeded; and there is no doubt it is a difficult river, and its Mahseer are "dour" beyond their wont, owing, I believe, to the depth and volume of its water and the heavy rainfall in these parts. It fines down, however, in February, and for about twenty days more or less in each year, from about the 7th to the end of that month, it is in its prime and affords splendid sport, after that the snow-water comes down, and the river is "sicklied o'er with the pale hue of chalk."

Fish the pool at the junction of the Great Rungeet and Teesta, and the pool in the Rungeet above it; the former with

natural bait, or a large silver spoon and strong tackle, and look out for "Goonch," the latter with small fly spoon "Scott's No. 2" mounted on fine single spinning trace. In both, if you would save your tackle and your temper, use a pliant 18 to 20 feet bamboo rod.

I should like to describe this "junction pool,"—for it is one,—the mere sight of which is enough to gladden the heart of an Angler, and to fish it is to carry away reminiscences and make red letter entries in your diary. A Sandbank, shaped like a big inverted V, divides the two rivers, and as you stand in the very angle of this, the Great Rungeet sweeps swiftly by on your left and plunges into the Teesta, almost at right angles, its clear greenish water cleaving a long well defined space right into the muddy stream of the Teesta, and forming a vast whirlpool, with a diameter of perhaps 80 yards, which lies below you and to your right? In the middle of this lie great Goonch and shoals of Mahseer. You cast across, and under the overhanging cliffs on the far side of the Rungeet—a long, long cast by the way—and as your bait touches the water, and is whirled to where the green and the yellow waters meet, but will not mingle, your heart is in your mouth and your nerves tense and strung, for you feel that one of those monsters is poised on the very edge of the turmoil, watching to snatch its silvery prey out of the swift, boiling stream. If he takes you there, his one, two, three, as he turns down the rapid, will be a revelation. If your top be stiff, or his tug finds you with your point down, nothing short of a miracle will save a break. Many is the time 'Sungoo' and I have fished it; often have we fitted on a new six-ply spinning trace and spoon, and returned again and yet again to that battered old tin box for "fresh casts and sinkers new." Those were crushing moments, when the fates were unpropitious; the memory of them can never quite pass away; but we can conjure up other visions too of many a scaly monster deftly shelved and laid out on that silver sand. My friend Carey and I used to work this pool in a Coracle, with a long rope, but I shall not recommend any one else to attempt it; an upset meant certain death.

At Kalijhora, where there is a rest house, and a small stream trickles into the Teesta, I have taken many a good fish (one of 40 lbs. on single gut), and lost many another. Far out in mid-stream, in the pool I am thinking of, there is a submerged red rock, for which every big fish makes;—keep him from it if you can.

There are bungalows at Peshok and the Teesta bridge, for the junction pool; at Riang and Kalijhora for the midway fishing; but at Sevoke you must have a tent and camp requisites. Here boats may be had, and there are grand pools within easy reach both above and below the bazar; but it is one of the most feverish localities in the Terai.

The Great Rungeet.—I have taken Mahseer and Carnatic Carp with a light spoon, in most of the accessible pools, between Singhiya and the Teesta junction, but the fish are “dour.”

Mahananda.—From the Siliguri railway bridge, down to the junction of the river with the Balasun, Trout (*Barilius Bola*) up to 1 lb. are to be taken. Use a light fly rod, trout cast, and ordinary trout flies; or a small fully dressed Blackamoor.

Balasun.—Mahseer up to 15 lbs. run up in the rains and afford great sport. In the dry season, Trout and Carnatic Carp are to be had on small fly spoon, and on the small Blackamoor.

The Rivers in the Western Dooars.

The Julpaiguri district affords the finest Mahseer fishing in Bengal, as no less than ten considerable rivers traverse it from north to south—beginning from the west.

The Karatoya—rises in the extreme north-west of the district, and passes into Rangpur. It is a sluggish stream with long sandy shallows, and here and there deep pools, under precipitous kunkur cliffs, in which Carp and fish of all kinds congregate. Although I have doubts of its holding Mahseer, it takes its place in my list, as here I was initiated in a new and most fascinating style of Angling, which I will attempt to

describe. In October the fish in this and other rivers like it, feed greedily on a green, slimy, vegetable substance, which gets broken up and washed down by the rushing water. At favourite spots along the river, morning and evening, may be seen fishermen doing effective work among them in a way far removed from one's preconceived notions; instead of the usual barge pole, cable and small anchors, you are surprised to find implements such as the sportsman delights in. A long light bamboo rod, often measuring twenty-five feet, fitted with a delicate bamboo fly top neatly spliced on, a fine tusser silk line, with small hook, and eighteen inches or two feet above it a diminutive reed float; lastly a bag full of the aforementioned bait. Thus provided, a man wades in up to his waist on the shallow side of the pool, a little slime is deftly wound round the hook, and the water is regularly fished as with a fly. There is art in baiting the hook; there is greater art in keeping the bait on, when casting; and you want the eye of a hawk and much practice to detect the slight quiver of your float, which tells of the gentle sucking in of the green morsel by some dainty fish down below. Many a big one breaks away in its first mad rush. The natives have no reels, so the rod is abandoned when a heavy fish is struck, and for an hour or so there is all the excitement of following it, and gently feeling whether it is time for persuasive tactics, until exhausted, and the prize may in safety be guided into the shallows and stunned. It is very like May-fly, while the chances of taking fish up to 20 or 30 lbs. are all in your favor. It may be seen at the right time of the year in a slightly modified form, in the station of Julpaguri itself, and is well worth study.

The Jaldhaka—rises in the Bhutan hills, dividing Darjeeling from Bhutan, and flowing through Julpaguri from north to south. I have fished it from near its source in the far off gorges of the Bhutan hills, down as far as Mynagori in the plains, where rocks and rapids have disappeared and its beds are sandy, and stream sluggish. Some of the best water can be fished from Nagrakatta by the courtesy and hospitable assis-

tance of the Manager of the Tea Estate of that name ; indeed, the pool at the junction of the Jiti and Jaldhaka is always good for a fish, but what a trap it is. There is a great fall in the Jaldhaka at this point, and just where the Jiti (a swift stream, twenty yards wide and two or three feet deep) joins it, there stands up out of the water, a huge rock five feet high, with flat level top, off which, to reach deep water, you needs must cast : almost invariably at the first good throw, you are taken, your fish races down a run of 150 yards or so, and you realize what is before you if you would kill your fish. A jump into two feet of water, a struggle across the Jiti, and then a frantic recovery of line, the while you are stumbling over boulders in vain efforts to reel, and feel, and follow. Once I led a victim to this rock and sacrificed him. He was no stranger, but I took him in, because he had been fishing ahead of me, losing casts, and spoons, and big fish all the morning ; and because it seemed a griffish, nay conceited thing to do, to hook a 27 lb. Mahseer by the tail and make me land it ; accordingly when we reached the fateful Jiti mukh, I inveigled him, by no means unsuspecting, on to that rock, carefully showed him where to cast, confidently awaited the result, and at his second or third cast there was a mighty splash, a sharp tug, his rod bent double, and a fine fish went away down the long rapid, just in the old sweet way to the music of his screeching reel. Shall I ever forget the look he gave me as he splashed into the Jaldhaka, or how he lost his footing and rolled over and over in the swift Jiti. When I recovered and could get to him, he was still sitting with his back to me, nursing his wrath and his knee, which he declared was broken. Do'st remember, Colin ? But to return. Near the Tondur Tea Estate there is splendid water, and some miles down close to Ramsahai is the Panbarri pool, where my chum, Godfrey D., landed a 42-pounder, and I have taken many a good Mahseer and Carnatic Carp on spoon and fly. For this river let me recommend the fly spoon and Blackamoor, and for big fish natural bait on one treble or a big single hook mounted on a wire trace. I can only find

notes in my diary of one trip to the Jaldhaka, the results were:—

November, 1886, Jaldhaka.

5th,	12,	10,	6,	and 14 others	17 fish.
6th,	12,	9½,	and 13 others	20 „
7th,	10 „
8th,	26,	and 5 others	6 „
9th,	18,	and 3 others	4 „
10th,	26,	20,	8,	8,	and 1 other	5 „
6 days	62 fish.

The Torsa—Is a considerable river which rises in Bhutan and flows south through the Western Dooars into Kuch Behar. It holds Mahseer up to 40 lbs., and is perhaps the best river for sport I have ever fished. Tents and elephants and boats required. “Sungoo,” Godfrey D. and I used to shoot from Luchmandabri up towards Benchapara and then drop down in boats, or “Mars,” poled by four men. These “Mars” are really boat-rafts, made by lashing two dug-outs together, and covering them over with a bamboo frame and tarpaulin. They are perfectly safe and steady, will carry chairs, guns, rods, and servants, and are grand things to fish off—

In January, 1886, I find I took—

20th,	7,	6,	3,	3	4 fish.
21st,	16½	1 „
23rd,	26,	7,	6,	4½, 4	5 „
24th,	5	1 „
26th,	18,	8,	7,	4, 4, 4	6 „
27th,	25,	22,	10,	7...	4 „
6 days	21 fish.

I could tell of many happy days on the banks of Torsa, of tigers shot and fish taken by the “Trio” and their wives, in those good old days. But time is short and I must to the Sunkos go, omitting mention of the Kaljani, Munsai and Raidakh, in all of which there is grand fishing.

The Sunkos—Marks the extreme eastern boundary of the Western Dooars, separating them from the Assam district of Goalpara. In the years I write of, it was a difficult river to get

at. Tents, elephants, and elaborate camp arrangements being necessary, and it was deadly for servants. The fish run up to any size, and if you have the luck to be there on the right day, in a taking pool, at the mouth of one of its numerous tributaries, verily the Sunkos shall not disappoint you. At Gordon Gunge, far up on the Bhutan frontier, there are glorious pools, and any amount of fish; Haldibari, Manjhadhabri, all names associated with scenes and faces which crowd in on me, and render powerless this pen of mine. Many a 40-pounder has been killed, and many a big record made at each and all of these places. But I have notes, alas, of only one which you shall have:—

March, 1885.

8th, 12, 8, 8. 7, 6, 2, 2	7 fish.
9th, 10, 10, 6, 5, 3	5 „
10th, 37, and 8 others...	9 „

The big one fell to the rod of my friend and pupil, "G. G." We were at Manjhadhabri shooting with H. H. of Cooch Behar, and very little time to give to the Mahseer. In April, 1887, four of us risked everything for a week at Haldibari, and despite the awful heat, secured over 900 lbs. of fish. November and December are the best months for big fish; but roads and communications at that time of the year are awful; and the risk of fever very great.

"KNAVE."

56.—*Fishing in Laour, Assam.*

The following is an Extract from the *Asian* of 23rd December, 1879:—

I have just got back from Laour, where I went on a fishing trip, and had very fair sport.

Extract from my diary:—

November 19th, got <i>nil</i> , lost 4 fish.
,, 20th, ,, 1 lbs. 19, lost 3.
,, 21st, ,, 2 30, 36.
,, 22nd, ,, 6 46, 31, 41, 25, 13, 12.
,, 23rd, ,, 2 44, 30.

November 24th,	got 2 lbs.	24, 32.
„ 25th,	„ <i>nil</i> ,	gave the good pools a rest, and tried some new water.
„ 26th,	„ 3 lbs.	18, 58, 55.
„ 27th,	„ 3	29, 29, 62.
„ 28th,	„ 8	16, 54, 20, 33, 7, 32, 33, 26.
„ 29th,	„ 2	28, 26.
„ 30th,	„ 1	28, tried new water again.
December 1st,	„ 1	21.

Of course, besides these fish, I lost several, of which I kept no account. I got them all trolling with spoons four inches long. I tried the fly, but without success.

The river is called the Punateet, and runs out of the Khasia Hills at Laour. To get to it, you have to branch off at Sonam-gunge (on the Soormah) and go by boat to a village called Elamgao; here you can get dingies and boatmen to take you up the gorge; where you must rough it in a grass hut. It is a beastly unhealthy place. Every time I go there all my servants are knocked over with fever. I got it once myself, but on that occasion I was there for six weeks.

57.—*Notes regarding fishing in Assam, by F. PEACOCK, ESQ.*

Fishing in Assam, Garo Hills, thirty-six miles from Mymensingh railway station to the north. River Sarasati, near a place called Durgalipur, the best fishing to be had about twenty two miles from Durgalipur between two villages, Ryuk and Seejoo, and about two miles beyond the latter place. The water is well known in the neighbourhood. The best way to reach the water is by rail from Calcutta to Goalundo $8\frac{1}{2}$ hours; thence by steamer to Naraingunj, $10\frac{1}{2}$ hours, thence by rail to Mymensingh, 7 hours. From Mymensingh to Durgalipur is a road good for driving part of the way and for riding the whole way. The place was visited in February with good results. In 1877, 48 fish, weighing 877 lbs., or over an average of 19 lbs., per fish, were killed by two rods in $3\frac{1}{2}$ days, all Mahseer. The best

way to fish is with a spoon, from boat moving. On hooking a fish it is best to land and play him from the shore."

58.—*Fishing in Burma.*

The following is from the *Madras Times* and from the "Rod in India":—

My experience is confined to fishing in Burmah, Assam, and Sylhet. There is capital shooting and fishing in Cachar; moreover, the Cosseyah and Jynteah Hills are easily got at, and the climate there is equal to Coonoor.

The late Dr. Jerdon assured me there were some twenty-seven varieties of Mahseer; but in general only three are recognised in Assam and its dependencies. They are called the Useel Mahseer (the true Mahseer), the Boga Mahseer, and the name of the third I forget. The upper part of the body to the central meridian line is almost a golden brown, the fins red, whilst the lower part is bluish-silvery: the lips, especially the upper, are very thick, the upper can be uncurred. It is out and out the handsomest of the Mahseer, and gives the most sport. Mr. Thomas appears only to have fished for these fish from the bank; a far more killing mode is to troll out of a boat. Whether the Madras boatmen are capable of propelling a boat up rapids I don't know, but the Karens, Burmese, and Cosseyahs will take a light boat up frightful rapids with perfect safety. The plan is to trail your bait a good 50 yards behind the boat, and the sport is thus very exciting. As Mr. Thomas justly remarks, the large Mahseer are bottom-feeders and in clear streams, whilst the smaller fish can be seen swimming about midstream, the small fry near the surface, the monsters keep near the bottom, so if you want big fish, fish deep. The fly is most killing in shallow rapids; a man should wade in pretty deep, and if a practised hand, he will kill many fish, but few of them will be above 10 to 14 lbs., and the greater number a good deal less. In the Dehra Dhoon, they are the most gaudy flies, but where I have fished, the most killing fly was a medium-sized No. 4 or 5 semi-circle hook, dressed like the Cock-o'-the

walk as described by Mr. Thomas at page 101. For smaller fish the smoky dun was most killing.

For spinning I have found nothing equal to a large spoon. In the waters of the Upper Burhampootra—especially near Suddyah—Mahseer are very plentiful, and run to a very large size. The best fishermen in Assam, in my day, were the late Capt. Hood (“Robin Hood” of the *Field*) and Col. Combes, (“10-bore” of the *Oriental Sporting Magazine*), the latter especially made very large bags, but he preferred the fly, and he has caught with it, I believe, fish up to 40 lbs. in weight, but he is the only one I ever heard of performing such a feat, whilst with the spoon and dead-bait they have killed fish up to 70 lbs. in weight. For some years I carried on an active warfare with Farlow; he would not make his treble hooks strong enough; at last I got him to make the hooks Mr. Thomas alludes to in his book. Many a fish have I lost, and many an anathema have I hurled at Farlow’s head because he would not credit that a Mahseer is capable of doubling up the strongest Salmon or Pike hooks. I have had the hooks straightened, too, many a time, but at last we came to an understanding, and Farlow is now by far the best man to go to for not only hooks but for every description of tackle.

Besides the Mahseer, we used to catch what the Bengalees call Bassah, and the Burmese, Nga Memein. It is allied to the cat-fish, and has no scales; it is delicious eating, and takes a fly or a spoon readily. This fish can be caught in great numbers in the Shoayghin river; it does not give much play after being hooked. As for Murrel I have seen thirteen varieties exposed for sale in the market at Terriat Ghât, at the foot of the Ghât, leading up to that moist place Cherrapoonghe, with its 50 feet of rainfall in the year. . . .

My first trip towards Sylhet was in 1869, when General Blake was with us. My journal of this trip is not here, so I speak from memory alone. He, Ommanney, and I started in November. We went first to Nurting, where we shot duck, teal, and snipe; then to Jawai (Jynteah Hills,) and so on across the

Hills to the Darrung river. . . . In the depths of the pool below we could see in the clear limpid waters not one Mahseer, but literally thousands. . . . Ommanney caught a couple of fish. . . . The Cossyah boats are very roomy, very buoyant, and are easily propelled by the muscular arms of these Cossyhs. I got hold of a capital fellow, the only word of English he knew was "wind up" which he kept repeating whenever we came to a rapid, where there was danger of losing the spoon, or when I struck a fish. We tried in the vicinity of our encamping ground, but though we could see the fish in dozens, they would not look at our baits. We could ascend the river only about a mile, and were then stopped by waterfalls. I went up as far as I could without getting a bite; I had to go through these rapids. Coming back, I struck a trout-like fish at the edge of the rapid, and it was drowned before we got into smooth water.

Below our camp, towards the plains, the river was navigable for about two miles, when it was partially dammed up by the Cossyhs. There were alternately rapids and reaches of deep water. In one place which we called the gorge, it was at least 50 to 60 feet deep, with the steep hills rising abruptly out of the water's edge. I went down to the obstruction without a bite; coming back, I put on my largest spoon, weighted it heavily, and in the centre of the gorge struck a large fish which immediately took out 50 yards of line. After several rushes, I got the boat moored in a sandy nook and gradually drew the fish towards me. General Blake now joined me and stayed with me till the fish was killed. We could watch its every movement; it did its best to release itself from the hooks, it would be almost on its side and rub its mouth into the sand. Presently a fish, every bit as big as himself, came by to see what the commotion was about, the hooked fish went at him like a tiger, taking out some 40 yards of line. The sun was well up, the glare very unpleasant, and the perspiration pouring down my face and almost blinding me; yet I stuck to my fish, and after upwards of an hour's struggle, got it into the shallows, where "wind up"

cleverly relieved him. It weighed just 28 lbs. and was, perhaps, the handsomest fish I ever caught, and gave the most trouble to kill. The next day I went below the weir, and, amongst other fish, caught one about 35 lbs., but killed it in about a quarter of an hour. Lightfoot, of the 44th, and Charley Wilson, of the Artillery, an old school-fellow of mine, joined us, and we remained fishing in these waters three more days, and then went partly across country, and partly by water to Jynteeapore, and thence back *via* Jowar to Shillong, putting up some woodcocks *en route*.

I cannot give full particulars of this trip, because, as I have said before, my journal is not by me. But in 1870, early in September, Colonel Hicks, Ommanney, Baurne, of the 44th, and I, started for these diggings *via* China Poonghe. I need not enter into details of our march. At Jerreah, there is a river, which used to be, some years ago, full of Mahseer, but it has been so poisoned of late years by the Cossyachs, that very few fish are left. The river is full of limestone rocks, and if you strike a fish, you cannot afford to play it, as it is more than likely to get into a hollow rock, when you have to cut him adrift. We commenced to fish on the 14th. Ommanney with spoon only caught two fish, one 3 lbs, one $2\frac{1}{2}$ lbs., and 14 small fish with the fly; I got one 3 lbs. only. On 15th, Baurne caught one 5 lbs., one 3 lbs., and one 2 lbs. Colonel Hicks, one 8 lbs., and one 3 lbs. I had to cut one adrift that got under a rock, but caught three, weighing respectively 20 lbs., 9 lbs. and 2 lbs., all on the same spoon. Ommanney, one 3 lbs., one 2 lbs., and a lot with the fly.

On Saturday we moved towards the Darrung river, and tried a cross cut. Owing to the dams constructed by the Cossyachs we had great difficulty in getting into a branch river, which was connected with the stream we wished to get to. After an infinity of trouble to get to Lakat, we sent for boats to take us on, and put up for the night on a sandbank. During the night we heard fish jumping about, but never thought for a moment that there were Mahseer so far down in the plains. Early next morning, on starting, I threw out my line, without

thinking for a moment I should hook anything, but in a second I had struck a very heavy fish. The others crowded round my boat, some declaring I held the fish too taut, others that I gave it too much line ; I paid no attention, but worked the fish my own way. At last it kept turning over, belly uppermost, and a beauty it looked too, with its large red fins and tail ; it was reduced to the last gasp, and was almost within striking distance of my two-pronged spear, when it gave a last convulsive struggle, and, in turning over, got its body across the line, one beastly hook snapped, and the other two straightened, and off went my monster ; Ommanney and I were together, fishing with exactly the same tackle, which was in fact mine. We all got our lines out at once, I kept having all the luck. It began to rain, Baurne had got on ahead, with Colonel Hicks. As our boat approached a rapid, we saw Baurne coming down it, fast to a very big fish, with all his line out. As he passed us I struck a heavy fish which I bagged in half-an-hour ; no sooner was my spoon in, than I had another fish, a 22-pounder, which I also landed. Baurne passed in a very despondent mood, having lost his monster. Our hut this time, thanks to Major Stewart, also a good fisherman, was built on the plains side of the gorge, near the weir. We arrived here at 10 A.M. with the following bags :—Colonel Hicks, nine fish weighing 43 lbs., largest 13 lbs. Baurne six fish, 27 lbs. largest 11 lbs. Ommanney, one fish, 6 lbs. I with five fish, weighing 66 lbs., the largest 32 lbs. The size of this fish was 3 feet 9 inches long, 2 feet in girth. In the afternoon, Colonel Hicks caught one 16 lbs., two 4 lbs. each. I caught one 9 lbs., one 2 lbs., one $\frac{3}{4}$ lb., one 5 lbs., one $1\frac{1}{2}$ lbs. Baurne, one 4 lbs., one 10 lbs. Ommanney, seven fish, 47 lbs., the largest 26 lbs.

Monday morning, Colonel Hicks, one 4 lbs., one $\frac{1}{2}$ lb. I, one 12 lbs., one $9\frac{1}{2}$ lbs., two 4 lbs. each, one 4 lbs. Baurne, one 8 lbs. Ommanney, one 8 lbs. In the evening, I caught one 41 lbs. (4 feet 3 inches long, 2 feet 3 inches girth), one 4 lbs. Colonel Hicks, one 7 lbs. Tuesday morning, Ommanney, one 30 lbs., one 20 lbs. Colonel Hicks, one $1\frac{1}{2}$ lbs., one $\frac{1}{2}$ lb. I, one 7 lbs., one 5 lbs. We then moved back to the sandbank near

Lakat, fishing our way back. It was almost dark, that is night, when we got there. There was a bright moon, if I remember aright. Opposite to the sandbank another river joined the Lakat stream. Always remember when fishing to fish a little below the junction of two rivers ; if one comes out of the hills close by, and the other through a stretch of plains, so much the better, the fish will assemble at the mouth of the warmer stream in search of food. As fast as we could throw in our lines, though dark, we had a fish on ; for a while my spoon was jammed without my knowing it, and as it did not spin I caught nothing, but as the others were catching them as fast as possible, I carefully examined by bait, put it to rights, and at once hooked a whopper. We caught altogether off this bank as follows :—

Ommanney, two 17 lbs. each, one 6 lbs., one 8 lbs., one 10½ lbs., one 11 lbs.

I, one 25 lbs., one 3½ lbs., one 14 lbs., one 6 lbs., one 3 lbs., one 31 lbs.

Braune, one 14 lbs., one 4 lbs., one 2 lbs., one 11 lbs., one 3½ lbs., one 2½ lbs., one 10 lbs.

Colonel Hicks, one 10 lbs., one 3½ lbs., one 11 lbs., one 4½ lbs., one 7 lbs.

Could any one wish for better sport, and the greater part, after the sunset, and in a place where it was thought no Mahseer existed? I won't weary your readers with further details of sport. Baurne and the Colonel left that night, and Ommanney and I followed early next morning. My tackle, for a time, was again jammed. Ommanney killed in a couple of hours, one 26 lbs., one 22 lbs., one 20 lbs., one 14 lbs., one 4 lbs., whilst I got one 14 lbs., one 6 lbs., one 4 lbs. So much for sport within a day and a half's journey of Cachar, a few hours from Silchar, two days from Shillong. May this be of use to your readers, and to Mr. Thomas in particular, whose acquaintance I have not had the pleasure of making, except through his excellent little treatise."

"PHOONGHEE."

No. 59.—*Fishing in Assam reprinted from the "Asian" of 30th August, 1895.*

POOJAH FISHING.

LOVERS of the gentle craft may be congratulated upon the prospect before them a month hence, when many can throw business cares aside for the nonce, spending a brief holiday amid the pools and rapids under the hills. Steam and rail communication with the haunts of the Mahseer are easy and rapid enough, so that, even a fortnight's leave, should enable the angler to secure a full week's fishing either in the N. W. or N. E. The waters will not have assumed that crystal brightness they do later on in the season, so trolling will probably prove more successful than the use of the fly, though it is as well to carry the latter for exposed situations. With regard to the N. E. fishing grounds, many object to going to the higher reaches in the ravines, as it necessitates crossing bheels, but a great deal of misconception exists concerning these huge lagoons. Bheels are only unhealthy when draining, and, as this seldom commences before the middle of October, there need be no apprehension on the score of fever. Moreover, passing over even a draining bheel in the day time can be done with perfect impunity, though it is as well not to sleep in your dingy ; but none of these wastes are broader than half a dozen miles, just about an hour's pull, when at all the good fishing stations you are away from swamps and any jungle likely to generate malaria. Every village, and such bungalows as Lagrin, opposite Sonamgung, Shella at the entrance of the Boga Pani gorge, distant but six miles from Chattuck, Terriah Ghat at the beginning of the ascent to Cherrapunjee, rest upon either well drained gravel or limestone where you are perfectly safe. The same conditions obtain at Jafflong, Jaintiapore, for the Noagong, Burghat, the debouchere of the Myntadu (or Hari as the Bengalis term this river), the Loobah, Lallong, and all the numerous streams upon the banks of which the North Sylhet and Cachar tea gardens have been established right up to Jerii Mook on the

Munipur frontier, whence you may proceed up to Tepai Mook, some six miles further up, where the Barak and Tepai are confluent. This latter place teems with fish, but the water is bright and clear. There is plenty of good shade, and not the remotest risk from the Lushais now, who visit the weekly hât higher up the Barak ; the boulders render locomotion difficult, and anything like a run, should you hook a whopper, is impossible. Jerii Ghat must not be confounded with Jerii Mook, where the stream joins the Barak, and is a short distance above the sub-divisional head-quarters of Luckipoor. You may get Mahseer at the former, but the water runs over a shallow sandy bed without a rapid, and the Indian salmon lurks not in such places, while above the ghât the river narrows, and the pools are hardly fitted for spinning. The Dighee affluent is merely a small cherra, so need not be taken into account ; the real ground lies between the mook and the ghât, and fine big fellows may be seen breaching in the bends under the bank, but where the river enters the main stream is decidedly the best position to take up. The feeder steamers should run up from Silchar well into October, so there ought to be no difficulty in getting to and from either of the two places mentioned. If you care to bring away a memento of your visit, you may wash the shingle near the water's edge, and obtain fine grains of gold, either on the Tepai or Jerii, but it is not my purpose to boom Cachar gold. Coming down the north side, the Lallong and Goomrah are well stocked, and as there are gardens on each, there is no difficulty in finding quarters. The Loobah is unique as a fishing ground ; at its junction with the Soomra, basha readily take the fly, minnow or small spoon, while popta (pubbia) rise well to the black gnat ; the garfish on this stream is a bit of a nuisance, for though he seldom rises to the fly, he goes greedily for any trolling bait, and as their long jaws are fitted with a formidable array of fine cutting teeth that unless your trace is wire covered, you stand the chance of losing the bait and a good portion of the trace itself. I once had a good sized Mahseer following my troll, coming closer and closer at each cast, when

the above abominable fish dashed up and snapped the trace, thereby losing me an expensive artificial minnow and the Mahseer besides ; if a gar does get hold of your bait, jerk him out at once ere he has time to do any mischief. Khasias eat this fish, but to European taste he is worthless, being bony, flabby and insipid. Although the Loobah, as it flows through the plains from Malagool down, affords decent sport, real work commences at the rapid above the tea gardens, nearly opposite the bazar, but this is better fished in the evening, being much exposed. During the day the first rapid within the gap is a capital spot, and, except at high noon, pleasantly shaded by the tall cliffs that rise almost perpendicularly from the water's edge. All kinds of fish flit about among the enormous fragments of rock that have fallen from above, suggestive of what might happen did a shake up take place while one was in this place. Many years back, in talking to some Wardhars (valley dwellers) at Sittang Bazar, they unfolded an interesting tradition that, pieced together and reckoning the average life of a hillman at 40 years, coupled with an examination of the rocks in the pools and the comparative freshness of the cliff face from which they had evidently been detached, brought the date of the fall down to about that of the great earthquake of 1775 which was felt all over the Old World, and even on the Eastern coast of China, so the fisherman on the Loobah can speculate upon past convulsions of nature with all evidence before him when resting from his labours during the midday spell. Next in order comes the Hari with its Eastern affluent, the Rewai. The latter, where it falls into the former, is a capital spot for either bait, and though the first reach does not present an over-promising aspect, matters improve once this is passed, when the stream divides, the deepest and best branch being the northern one, with a series of cascades and pools extending back into the hills for some three miles, where it ends in a waterfall near the village of Maolong.

Every yard above the end of the first reach is fishable, and the banks well shaded, while as Bengalis cannot make use of

nets, owing to the uneven character of the ground, spawning goes on almost unmolested, the rocky nature of the banks preventing otters from burrowing into them, though an occasional beast does now and then put in an appearance. Until reaching the Poonjee of P's'dar, the Hari furnishes but little sport beyond basha and gooneah, and the latter will seldom take the hook, but all above this, where the first considerable rapid occurs, good fishing is to be had, but the place *par excellence* is half way up to Burghat, where a splendid tumble of water takes place, running for some four hundred yards, in which the fish breach and bound in splendid style all day long. There is not much to be had in the huge basin in front of Burghat, except by spear and cresset at night, and then only the black carp which the Syntengs call *calearra*. The Burhil near the Jafflong Tea Estate can be reached best from Gwina Ghât, and although there is not much water, it will well repay a visit. Inside the gap is the best place, and you can put up in the village of Dowkee. The river is known as the Mungat here, and a lot of fish get left behind in the pools; the ground is of the rough-and-tumble nature, the moss making the boulders very slippery. Terriah Ghat hardly needs referring to, being so well known, the river, a good fishing one, running some seven miles from Bhola-gunge, the deep reach just above the Rajah of Cherra's bund affording splendid sport.

The Maolong Khall in its higher reaches is another fine place, but as the inferior coal here is come upon, the water is impregnated with a peaty taste, which the fish don't appear to appreciate. The streams between the Maolong and the Bogapani contain pooties and similar small fry, but the big stream makes capital ground from the Maomlew Valley right down to the mouth at Duwari Bazar. Of course, at the bazar only the smaller kind are to be had, but at the mouths of all the affluents of the Soormah splendid large chingrees are obtainable. The common *bag marsh* give good sport, the tackle is strong enough to hold him, but has a trick of sulking among submerged weeds, which is annoying, especially after sun down. Cutla and other

bheel and tank fish are sluggish and lazy when struck, but the absence of the more lively of the finny tribe may pass muster among the less ambitious fishermen for a day's outing.

SYNTENG.

60.—*Notes regarding various fishing localities in Northern India, of which there are no detailed notes available.*

(1.) It is believed that fishing is to be obtained in the Ravi near Lahore, but probably only bottom-fishing as at Wazirabad on the Chenab.

(2.) Fishing is obtainable in the Beyn river, near Jullunder, but probably only bottom-fishing.

(3.) In a canal near Amritsur, there is a little fishing, but name or locality is not known.

(4.) Tank fishing is obtainable at Batala, Gurdaspur district.

(5.) Fishing is obtainable in the Ganges canal near Roorkee.

(6.) It is believed that there is a stream falling into the Jhelum near Pind Dadun Khan, in which there is Mahseer-fishing.

(7.) There is fishing in the Bata river, a tributary of the Jumna.

(8.) There is good fishing in the Kauriala, Baraich district, and in its tributaries, the Girwa and Mohan.

(9.) There is fishing in the Ken (or Cane) river, near Banda, North-Western Provinces.

(10.) The Sone river, Central India, affords good fishing.

(11.) There is fishing in the Beylun, near Mirzapur, North Western Provinces.

(12.) It is believed there is fishing obtainable in the Bagan and Pysani, near Kirwee.

(13.) There is fishing in the Dessau river, between Jhansi and Nowgong.

(14.) Good fishing is obtainable in the Herun river between Saugor and Jubbulpore. I have fished this river once or twice,

but have no details, nor did I try it sufficiently to decide which was the best bait, etc. There is a good pool near Sehora—two marches from Jubbulpore.

(15.) There is fishing in the Chumbul at Bhind, two marches south of Etawah on the road to Gwalior. I have caught Mullee and Tingra near this place. There is probably good fishing at the junction of the Chumbul with the Jumna, lower down.

(16.) There is some fishing in the Chumbul at Dholpur, but permission is required to fish at this place.

(17.) There is probably bottom-fishing obtainable near Ferozepore in the Sutlej.

(18.) The junction of the Hurroo and the Indus, is a place seldom if ever visited. I have seen it from a distance, but never actually visited it myself. Some enterprising sportsman from Cambelpore would, I think, find it worth while to visit it, and give the place a good trial. For all we know this place, if fished properly from a boat, might prove another Torbela or Tangrôt.

(19.) There is fishing obtainable in the Sirun, at Khaki, two marches north of Abbottabad, but I do not fancy the fish run to any size.

(20.) Fishing is obtainable in the Liddar river, Kashmir, but I do not know if this river contains Mahseer or only Kashmir Trout.

(21.) There is fishing near Allahabad, but of what description I do not know. I have been told that fish can be caught near the Papamhow bridge, but with what bait, or what kind of fish, I am ignorant!

(22.) There are numerous rivers in Assam, where magnificent fishing is to be had, but of these also I have no details, beyond those given in Articles 56 and 57 in this Chapter.

(23.) There is probably fishing at the junction of the Sohan with the Indus near Kalabagh.

(24.) There is probably some fishing in the Dore river which joins the Sirun at Thapla, but I have only seen fish up to a pound weight or so in it.

(25.) There are, it is believed, tributaries of the Beas (besides the one mentioned in Article 44) in which there is probably good fishing.

(26.) I have been informed there is good fishing in the Indus, four marches below Leh, but the fish are not Mahseer. My informant does not know the name of the fish, although he caught a good number.

(27.) There is excellent light fishing (Mahseer) on the Loralai road near Kharr. The fish take a fly, and can be caught in the cold weather.

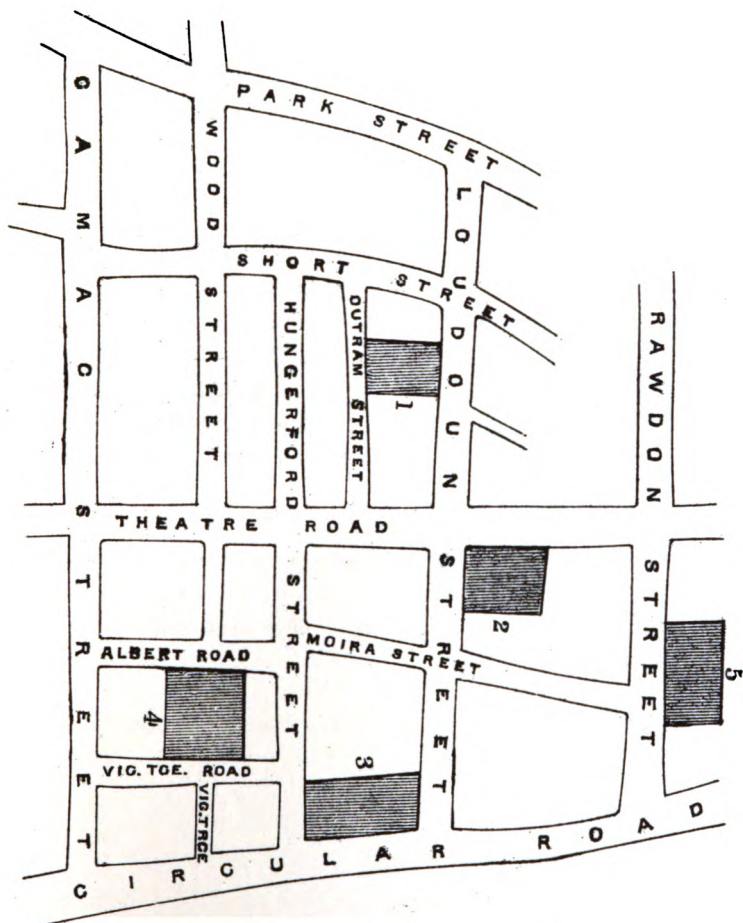
28. *Afghanistan*.—There is fishing in all the streams of Afghanistan; Mahseer and Indian Trout are caught, the former with a small fly-spoon, the latter with a fly. Both can also be caught with a worm or with paste. The following are the names of some of the streams:—Gilgit, Chitral, Kunar rivers. Panjkora (44 lbs.) in Swat, Swat (10 lbs.), Ali Masjid (small), Cabul river at Jellalabad (10 lbs.), Kūrm river; in Waziristan are the Tochi, Koshi and Zam; Zhob stream (5 lbs).

29. *Calcutta*.—There is a Fishing Club in Calcutta, called the "Calcutta Angling Club," of which Mr. A. J. Parker, of 3 Fairlie Place, is the Honorary Secretary. They have six tanks in which they do bottom fishing. The attached chart shows five of the six following tanks:—

				Yds.
No. 1.	The Short Bazar or Thana Talao.	Water area	...	90 × 60
„ 2.	The Panch-koti Talao	75 × 55
„ 3.	The Jhow Talao	135 × 70
„ 4.	The Victoria Talao	125 × 85
„ 5.	The Auckland Square	125 × 70
„ 6.	The Dalhousie Talao*	210 × 140

In addition to the above, fishing may be had in the Havildar's tank, in the Zoological Gardens Society's tanks, in those on the Maidan. Rohu, Kalbans, Catla, Mirgal, Gudgeon, Megalops, Saralpoti, Prawns are caught in the tanks. Estuary fish are caught in the Hughli.

* Not shown in the Chart, its situation being well known.



Lith. & Printed by W. Newman & Co., Calcutta.

61.—*Recapitulation Table giving all likely routes that an angler may require to travel by, in the Northern Punjab, Kashmir, etc., showing marches and distances.*

No. 1.—Rawulpindi to Srinagar via Murree.

Rawulpindi to Murree	39 miles—by tonga.
Murree to Dewal	12 „
Dewal to Kohala	9 „
Kohala to Dulai	12 „
Dulai to Domel	9 „
Domel to Garhi	12 „
Garhi to Hatti	11 „
Hatti to Chakoti	15 „
Chakoti to Uri	17 „
Uri to Rampur	13 „
Rampur to Baramula	12 „
Baramula to Srinagar	34 miles—by boat.
or halt at Patan by road.		—
Total	195 miles.

No. 2.—Rawulpindi to Srinagar via Abbottabad.

Rawulpindi to Jani-ki-sang	14 miles.
Jani-ki-sang to Hassan Abdal	14 „
Hassan Abdal to Dehdar	9 „
Dehdar to Hurripur	10 „
Hurripur to Sultanpur	14 „
Sultanpur to Abbottabad	11 „
Abbottabad to Mansehra	16 „
Mansehra to Garhi Habibulla	16 „
Garhi Habibulla to Domel	13 „

Here the road joins in on the route above given.

No. 3.—Rawulpindi to the Muhl, via Murree.

Rawulpindi to Murree	39 miles.
Murree to Thanda	13 „
Thanda to Dhalcote	11 „
Total	63 „

Or—

Murree to Phagwari	15 miles.
Phagwari to Dhalcote	15 "
			—
Total	...	69	"
			—

No. 4.—Rawulpindi to the Muhl via Khanna.

Rawulpindi to Chirah	16 miles.
Chirah to Nirai	14 "
Nirai to Kotli	15 "
Kotli to Dhalcote	14 "
			—
Total	...	59	"
			—

The above route is seldom if ever travelled over by Europeans, and coolies would probably not be obtainable at Kotli or Nirai.

No. 5.—Rawulpindi to Poonch, via Kahuta.

Rawulpindi to Kahuta	22 miles.
Kahuta to Patan	15 "
Patan to Pilandra	15 "
Pilandra to Pulwari	14 "
Pulwari to Jhira	14 "
Jhira to Poonch	14 "
			—
Total	...	94	"
			—

The above route is very difficult, and coolies and supplies hard to obtain.

No. 6.—Rawulpindi to Tangrot.

By rail to Dina—

Dina to Tangrot	16 miles.
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No. 7.—Tangrot to Poonch.

Tangrôt to Chowmook	10	miles.
Chowmook to Bihari	9	"
Bihari to Sensar	14	"
Sensar to Kotli	15	"
Kotli to Saira	15	"
Saira to Poonch	14	"
Total			77	"

The above route is the usual road.

No. 8.—Tangrot to Poonch—fishing up the river.

Tangrôt to Chak	6	miles.
Chak to Palak	8	"
Palak to Kirmal	5	"
Kirmal to Nar	6	"
Nar to Chak	8	"
Chak to Thatli	5	"
Thatli to Kotli	6	"
Kotli to Leri	9	"
Leri to Mendla	7	"
Mendla to Madarpur	6	"
Madarpur to Poonch	7	"
Total			73	"

No. 9.—Poonch to the Mahl.

Poonch to Kharidraman	14	miles.
Kharidraman to Tuli	9	"
Tuli to Bagh	10	"
Total			33	"

Or—

Poonch to Jhira	14	miles.
Jhira to Parl	14	"
Parl to Raoli	14	"
Total			42	"

No. 10.—Kotli on the Poonch to the Mahl.

Kotli to Saira	15	miles.
Saira to Jhira	14	"
Jhira to Parl	14	"
Parl to Raoli	14	"
			<hr/>	
Total	57	"
			<hr/>	

No. 11.—The Mahl (Dhalcote) to Tangrot via right bank of the Jhelum.

Dhalcote to Rampattan	14	miles.
Rampattan to Sihor	18	"
Sihor to Bihor	10	"
Bihor to Choa	18	"
Choa to Zabr	11	"
Zabr to Bagam	15	"
Bagam to Tangrôt	8	"
			<hr/>	
Total	94	"
			<hr/>	

No. 12.—Poonch to Srinagar.

Poonch to Kahuta	9	miles.
Kahuta to Aliabad	8	"
Aliabad to Hyderabad	7	"
Hyderabad to Uri	10	"
(Uri to Srinagar, as by the Murree route.)				
			<hr/>	
Total distance Poonch to Uri	34	"
			<hr/>	

No. 13.—The Mahl (Bagh) to Uri.

Bagh to Kwaja	8	miles.
Kwaja to Kilana	9	"
Kilana to Uri	14	"
			<hr/>	
Total	31	"
			<hr/>	

No. 14.—Sialkote to Nowshera (Bhimber Towl).

Sialkote to Minaor	30 miles.
Minaor to Chamb	3 "
Chamb to Chapral	3½ "
Chapral to Jogwa	6 "
Jogwa to Sonpa	8 "
Sonpa to Nal	6 "
Nal to Tank	6 "
Tank to Kar	6 "
Kar to Nowshera	5 "
Total				73½ "

No. 15 —Gujerat to Srinagar (taking in the Bhimber Towl) by Pir Panjal Route

Gujerat to Bhimber—by cart or ekka	...	28 miles.
Bhimber to Saidabad	...	14 "
Saidabad to Nowshera	...	12 "
Nowshera to Changus Sarai	...	14 "
Changus Sarai to Rajaori	...	14 "
Rajaori to Thana Mandi	...	14 "
Thana Mandi to Baramgalla	...	10 "
Baramgalla to Poshiana	...	10 "
Poshiana to Aliabad Sarai	...	11 "
Aliabad Sarai to Hirpur	...	12 "
Hirpur to Shupiyen	...	8 "
Shupiyen to Ramu	...	12 "
Ramu to Srinagar	...	18 "
Total		177 "

CHAPTER VIII.

List of the commoner freshwater fishes of India from a sporting point of view, by DR. CRETIN.

SUB-CLASS *Teleostei*, Bony fishes.

ORDER *Physostomi*.

All the freshwater fishes of India belong to the sub-class of bony fishes (*Teleostei*). Most belong to the families of carps (*Cyprinidæ*) and sheat-fishes (*Siluridæ*). The carps have no teeth in the mouth, but have scales on the body. The sheat-fishes have no scales, but have teeth in the mouth.

FAMILY *Cyprinidæ*, Carps.

Forty-eight genera, mouth toothless, teeth in throat, no gristly fin, head scaleless, scales on body.

GENUS *Barbus*.

Seventy species, mouth arched, jaws closely invested by lips, back fin short.

A.—COMMON SPECIES, with four barbels.

(a). Back thorn strong and smooth.

B. tor.—Mahser, 5½ feet, 200 lbs., India generally.

Native names :—Hindustani, Mahasir ; Hindi, Naharm ; Panjabi, Kakhiah ; Marathi, Kadchi, Masta ; Sindhi, Jungah, Petiah, Karriah ; Nepalese, Sahar ; Assamese, Barapetiah, Barapatra, Jângâhpetiah ; Tamil, Bômmin, Pümmin, Kendai ; Canarese, Peruval, Harale-minu ; Mysore, Hälläminu ; Malayalim, Meruväl ; Tulu, Heragulu, Peruval ; Ceylonese, Kūriah, Lélá ; Jhelum, Kakär ; Sakhra. Natives pronounce the name of the fish as Mahser, Mahsher Mahsöl, Mahsiä.

D. (rays in back fin) $3/9$, A. (in anal fin) $2/5$, L.l. (scales in lateral line) 25—27, $2\frac{1}{2}$ scales (between lateral line and belly fin). The most distinctive character of the Mahseer are its very big scales. Head big, mouth big, upper jaw the longer, lips thick, colour silvery, shot with gold when alive, becoming leaden blue when dead, fins reddish yellow.

B. carnaticus.—Carnatic carp, Giddi Kaoli, Southern India, 3 feet, 25 lbs., D. $4/8$, A. $2/5$, L.l. 30—32, $3\frac{1}{2}$ scales, lower lip fold interrupted, greenish and brown above, white and gold below, fins greyish, eyes golden, mouth small, caught with a fly.

B. chilinoides.—Himalayas, $2\frac{1}{2}$ feet, Chitrahtu, D. $3/7$, 7—8, A. $2/5$, L.l. 32—35, 3 scales, lower lip with a continuous transverse fold, golden above, silvery below, black dots on edges of scales, black mark behind gill cover, fins reddish.

B. hexagonolepis.—Bokar, Himalayas, 2 feet, D. $3/9$, A. $2/5$, L.l. 28—31, $2\frac{1}{2}$ scales, lower lip fold interrupted, bluish grey.

B. hexastichus.—Himalayas, 3 feet, $3-4/9$, A. $2/5-6$, L.l. 25—26, $2\frac{1}{2}$ scales, brown and greenish above, white and gold below, tail and anal fins reddish.

(b). Back thorn strong and toothed.

B. chagunio.—Jerruah, Northern India, $1\frac{1}{2}$ feet, D. $3/8$, A. $3/5$, L.l. 44—47. Pores on snout and head, colour uniform silvery and pinkish, fins reddish.

B. sarana.—Olive carp of Northern India, 1 foot, Dārhi, D. $3/8$, L.l. 32—34, A. $3/5$. Colour uniform, fins whitish.

B. chrysopoma.—Olive carp of Southern India, 1 foot, Pungela. D. $4/8$, L.l. 28—30, A. $3/5$, dark blotch near tail, fins golden.

(c). Back thorn weak.

B. curcuma.—White carp, Western Ghâts, 4 feet, D. $3/9$, A. $3/5$, L.l. 41, $3\frac{1}{2}$ scales. Colour silvery, tip of tail back.

B. malabaricus.—S. India, $1\frac{1}{2}$ feet, D. $3\frac{4}{9}$, A. $\frac{3}{5}$, L.l. 24, $1\frac{1}{2}$ scales, bluish above, white below, fins blue, eyes red.

B—with two barbels.

B. mahicola.—Black spot, $\frac{1}{2}$ foot, S. India, D. $\frac{3}{8}$ A. $\frac{2}{5}$, L.l. 21, $2\frac{1}{2}$ scales, black-spot near tail fin, no filaments on back fin, 2 barbels, takes a fly.

C—without barbels.

B. filamentosus.—Black-spot, $\frac{1}{2}$ foot, S. India, D. $\frac{3}{8}$, L.l. 21, complete. Black spot near tail fin, filaments on back fin, no barbels, takes a fly.

GENUS *Labeo*.

Twenty-five species, easily recognised by the mouth being below the snout, *i.e.*, looking downwards, lips thick, horny with inner fold, no back thorn. Lips fringed, red spot on scale very often, and greenish above. Caught bottom fishing.

L. rohita.—India, 3 feet, Rohu, 2 minute barbels at corners of mouth, concealed in the fold of the lip. D. 15—16, L.l. 40—42, l. tr. $6\frac{1}{2}/9$. There are two varieties, one bluish above without red spots, living in clear spots; the other greenish above with red spots, living among weeds. Below they are both white. Big ones sometimes have two very small barbels on the snout.

L. calbasu.—India, 3 feet, Kalbans, 4 distinct barbels. D. 16—18, L.l. 40—44, l. tr. $7\frac{1}{2}/8$. There are two varieties, one slaty black living amongst rocks; the other greenish with red spots living amongst weeds.

GENUS *Cirrhin*.

Five species, easily recognised by a knob in the middle of the lower jaw inside the mouth, belly rounded, snout depressed, rounded, with the soft coverings very thin, mouth broad, across-lips thin, not continuous, lower jaw sharp, lipless, no back thorn. Caught by bottom fishing.

C. cirrhosa.—White carp, Vengcandai, S. India, $1\frac{1}{2}$ feet, D. 17—19, L.l. 42—44, 4 barbels, silvery with red spot on scale.

C. mrigala.—Mirgal, India, 3 feet, 18 lbs., D. 15—16, L.l. 40—45, 2 barbels, silvery, fins with black stains, eyes golden.

GENUS *Catla*.

One species, no upper lip, mouth upward, no barbels, large head.

C. buechanani.—Six feet, Catla, grey above, silvery below, fins dark. Caught by bottom fishing.

GENUS *Barilius*.

Fourteen species, small, mouth in front, big, deeply cleft, jaws compressed, lower jaw received into upper jaw.

B. bola.—Indian trout, Bägäräh, N. India, 1 ft., 5 lbs., snout pointed, knob on lower jaw, no barbels, scales small, silvery, two rows of bluish spots, tail orange with a back edge, lower fins orange, back fin grey. Caught with a fly.

GENUS *Chela*, Chilwas.

Ten species, small, body long and flat, belly with sharp edge, mouth upward, knob on chin, no barbel, silvery colour, take a small fly; used as baits.

FAMILY *Siluridae*, Sheat-fishes.

Scaleless, teeth in mouth. There are 4 genera, which attain a length of 6 feet. Two have long feelers, and are called cat-fishes. Two have small feelers, and are called freshwater sharks. They all take a live-bait picketed, or a spinning dead-bait; sometimes a spoon or phantom. They should all be fished for with wire or gimp, and treble hooks. They do not give much play, but are apt to sulk at the bottom.

Sheat-fishes is derived from *Schaid-fisch*, the former German name of *Silurus glanis*, the Wels of the Danube.

GENUS *Bagarius*.

One species, 8 barbels, no teeth on palate, back and breast thorns, gristly fin, upper jaw the longer, 6 belly fins.

B. yarellii.—Six feet, 250 lbs., Gunch.

Carrot-shaped, head naked with ridges, filaments on fins, colour grey with brown marks; the feelers at the corners of the mouth very thick.

GENUS *Wallago*.

One species, 4 thin barbels, no teeth on palate, no back thorn, breast thorn, no gristly fin, lower jaw the longer, 9—10 belly fins, 65—95 anal.

W. attu.—Freshwater shark, Bāwālli, Gwalli, Mālli, Laki, Pārān, 6 feet, 100 lbs., body long, compressed from side to side; head big, compressed from above downwards, cleft of mouth deep extending to behind the eyes, long anal fin not joining the tail, colour uniform silvery. It is a long, narrow, flat fish, with a big head, and a mouth full of teeth. Malli is derived from the last two syllables of Bawalli.

GENUS *Silundia*.

Two species, 2 very small barbels, teeth on palate, back and breast thorns, small gristly fin, lower jaw the longer, 6 belly fins, 40—50 anal.

S. gangetica.—Silānd, 6 feet.

Back fin small, anal fin not joining tail, body long, bluish above, silvery below, fins stained with grey.

GENUS *Macrones*.

Eighteen species, 8 long barbels, teeth on palate, back and breast thorns, gristly fin, upper jaw the longer, 6 belly fins, 8—20 anal.

Two species reach six feet, they are long.

They are called Cat-fishes on account of their long feelers. By natives they are called Tengra and Singhala. Singhala means tiger-fish, and corresponds to cat-fish. Tengra is derived from Singhala by Grimm's law.

GENUS *Pseudentropius*.

Six species, *Bachhwa*, 2 feet, 8 barbels, teeth on palate, back and breast thorns, anal fin long, separate gristly fin; it may be absorbed in the adult, and those individuals used to be described as a separate genus *Schilbeichthys*, and are called Bikri, air-bladder free, 27—55 anal, 6—8 belly fins.

GENUS *Entropiichthys*.

One species, *E. Vacha*, *Bachhwa*, 1 foot, same as above, except that the air-bladder is protected by bone, 47—50 anal, six belly fins.

GENUS *Callichrous*.

Seven species. Butter-fish, *Pafta*, 1 foot, 7 lbs., 4 barbels. cleft of mouth short of eye, teeth on jaws and Vomer, no gristly fin, breast thorn, no back thorn, back fin very small, lower jaw the longer, eyes covered by skin, anal fin long, with 45—95 rays, belly fin 10 rays.

The commonest species is *C. Cimaculatus*.

Native names :—*Hindustāni*, *Pafta*; *Panj*, *Gūngwā*, *Pallu*; *Marathi*, *Gugli*; *Ooriah*, *Pobta*; *Bengali*, *Pabda*; *Assam*, *Pah-boh*; *Tamil*, *Chota Wahlah*; *Malabar*, *Mungi Wahlah*; *Telegu*, *Dūka-dúmú*; *Canarese*, *Godla*; *Sind*, *Dimmon*; *Burmese*, *Nga nūthan*.

Can be caught with a worm or a prawn, or with a live-bait 2 inches long and a float.

GENUS *Rita*.

Four species, 1—4 feet. *Rita* is one of its native names, greenish and yellowish, 6 barbels, mouth across, upper jaw the bigger, eyes covered by skin, gristly fin, teeth on jaws, a plate of flat teeth on palate, with which it crushes water snails, breast thorn poisonous, back thorn. It makes for itself a tunnel at the bottom in which it lies in wait for its food. It quacks when out of the water. It survives a long time out of its element, 7—8 rays in belly fin, 12-13 in anal fin. Often caught when bottom fishing for other fish.

FAMILY *Notopteridæ*.

One genus, two species Body flat, back peculiarly arched, might be baptised as the "Hunchback." Scales small, head scaly, no barbels, no gristly fin, tail tapering, anal fin blended with tail fin, teeth on tongue, as well as in rest of month, belly toothed.

Small ones can be caught with a worm or a prawn. The big ones can be caught by a Paternoster. The belly is a delicacy; the rest of the fish is not good eating.

Notopterus Chitala—N. India, 4 feet, 40 lbs. The maxilla extends far beyond the edge of the orbit, back coppery with silver bars, sides silvery.

Native names :—*Bengali*, Chitala, Chitul; *Ooriah*, Chitul; *Assam*, Sitāl; *Sind*, Gāndān.

Notopterus Kaporat.—General 2 feet, 20 lbs. The Maxilla does not extend beyond the edge of the orbit, colour silvery with grey spots, eyes and head golden.

Native names :—*Hind.*, Moh; *Panj.*, Pārri; *Bengali*, Pholo; *Ooriah*, Pūlli; *Assam*, Kandālī; *Oudh*, Jāl Kafūr; *Marathi*, Chálat; *Tamil*, Chota Vale; *My-sore*, Wallak tatta; *Burmese*, Nga phé.

FAMILY *Scombresocidæ*.

One genus, 1 species, jaws beak-like, teeth big, conical, no finlets.

Belone cancila.—Garfish, 1 foot.

Long body, truncated tail, colour greenish, takes a spoon and a live-bait.

Native names :—*Hind.*, Unt, *Panj.*, Kāngā; *Marathi*, Kātra; *Ooriah*, Gongituri; *Burmese*, Nga-phon yo. *Tamil*, Pissu Kolah; *Assam*, Kokila.

FAMILY *Muraenidæ*—true eels.

One genus, 1 species, breed in salt water, the freshwater forms are sterile females, the larvæ are *Leptocephali*, can migrate overland, no breathing air sac, tongue free, tail fin round

tail, back and breast fins, no belly fins, scales very small, embedded in the skin, teeth small and in bands, lower jaw the longer.

Anguilla bengalensis.—4 feet general.

Colour brownish above, yellowish below.

Native names:—*Hind.*, Kālān; *Marathi*, Ahir; *Tamil*, Velangu; *Bengali* and *Ooriah*, Cuchia; *Telegu*, Dondu-paum; *Chittagong*, Salais; *Arracan*, Ngami-toung; *Burmese*, Nga-Shin; *Andaman*, Jitada.

ORDER *Acanthopterygii*.

FAMILY *Ryncobdellidæ*. Thorny eels.

Two genera, snout beak-like, ending in a fleshy tendril, no belly fins, gill openings and slit, three thorns in front of anal fin, thorns on back, scales very small.

GENUS *Mastacembelus*.

Snout smooth, thorn in front of orbit, five species of which two in India.

Mastacembelus armatus.—2 feet, general, Thorny eel, Bahm.

Back and anal fins blended with tail fin, colour brown, sometimes with a black band on side, fins spotted.

Native names:—Bahm in *Hind*, *Panj.*, *Sindh.*, *Beng.*, *Ooriah*, *Marathi*; *Tamil*, Kālārāl; *Tel.*, Mudi-bom-miday; *Burmese*, Nga-maway-doh-nga.

FAMILY *Ophiocephalidæ*,

Genus *Ophiocephalus*.

Nine species, Walking fishes, snake-headed fishes.

Long, rounded body, flat, scaly head. Cavities in the bones of the head to store moist air; mouth full of teeth, long back and anal fins, belly fins under chest; can travel overland, progression consisting in putting one breast fin forward, then the other, and giving a wriggle with the tail. Six of the species grow to three feet and over, and are called Mārāl in English and Sowl in Hindustani. The three small species, one foot, are called Black Caboose in English and Dhok in Hindustani. The two

commonest species are *O. marulius* and *O. striatus*. They can be served without bones and have a nice flavour. Mārāl are like Pike from a sporting point of view. They are caught with a live bait or a live frog ; sometimes they take a spoon.

Native names :—*Hindustani*, Maral, Sowl, Panj. ; Sowl ; *Bengali*, Sôl. ; *Ooriah*, Sola ; *Marathi*, Sohr ; *Canarese*, Marl ; *Tamil*, Viral ; *Tel.*, Sowārā ; *Malabar*, Wrahl ; *Assam*, Hāl ; *Chittagong*, Holi ; *Coorg*, Owlū minu ; *Singhalese*, Lulla ; *Burmese*, Nga-yan ; *Mugh*, Nga-ain.

O. marulius.—Four feet, general colour dark grey. greenish blotches on back, reddish blotches on belly. Easily recognised by having pearly white spot on scales. Eye-like spot on tail. The whole fish mimics a mouldy log of wood.

O. striatus.—Three feet, general colour blackish, light and dark bands on sides.

O. gachua.—One foot, used as bait.

FAMILY Gobiidae.

GENUS Gobius.

Forty species, mostly marine, long body, flat head, belly fins blended no lateral line.

G. giuris.—Mudfish, Indian Gudgeon.

Brown with blotches, back fin and tail spotted, skin transparent.

Native names :—*Hind.* and *Sind.*, Gūlū. ; *Panj.*, Gulūwa. ; *Ooriah*, Gālā. ; *Marathi*, Kharpa. ; *Tamil*, Ulave ; *Malabar*, Pūan. ; *Telegu*, Dūndū, *Canarese*, Ab-bro-ny ; *Chittagong*, B'ailla ; *Burmese*, Nga-ka-tha-boh ; *Arracan*, Owcha fo ; *Andaman*, Pūda.

Sporting fishes found in Estuaries.

FAMILY Physostomi.

GENUS Clupeidae.

Clupea Jlisha.—Sable fish, Indian Shad, Hilsa. A Sea-fish spawning in streams, belly keeled, colour silvery, shot with gold and purple.

Megalops cyprinoides, Big eye.

Big eye, oval pupils, mouth antero-lateral, teeth on tongue, base of skull, etc., back bluish green, belly silvery blue, brilliant silver on edges of scales on lateral line and on head, centre of jaws black. Caught by spinning.

Acanthopterygii.

Lates calcarifer.—Cock-up, 5 feet, 200 lbs., Begti (Calcutta) Nair (Madras). Grey, shot with green above, silvery below, during the monsoon with a tinge of purple. Caught by spinning.

Lujanus roseus.—Red Perch, 5 lbs., Dark reddish brown, becoming dull cherry red below. Caught by spinning.

Polynemus tetradactylus.—Bámin, 6 feet and 320 lbs. White filaments on breast. Silvery green above, yellowish below. Caught by spinning.

APPENDIX.

Fly fishing for Mahseer.

Fly-fishing for Mahseer is only about one-third as killing as spinning, and smaller fish are caught by it. The fly is more successful in Hindustan than in the Panjab.

Salmon tackle is what is wanted. The Mahseer rod and winch will do, but a double-handed trout rod fourteen feet long is more comfortable.

The best line is a double-tapered Salmon switching line, forty yards long, spliced to a tussa silk line, eighty yards long. The switching line is thick and heavy in the middle to cut the air; it tapers gradually both ways, so that the other end can be used when one end is worn. A twisted line, like the tussa silk line, can be used by itself. Your Mahseer spinning line will do. The cast or collar should be of best single Salmon gut tied with buffer-knots. The flies should be dressed on eyed single hooks. The best size is No. 4 Pennell Limerick with returned eye (Redditch scale). The gut should be tied by the slip-knot shown in the lower figure, page 76. Warner's patent eyed hook is also good. Any Salmon fly will do, but a black fly is the best. Thomas recommends the *Blackamoor*:—tag, three turns of tinsel; tail, two sprays of peacock harl; body, peacock harl very full and ribbed with three turns of tinsel; legs or hackle, peacock harl, beginning small, a little short of the tail end of the body, and carried up to the shoulder, hackle increasingly big and thick, and making also the shoulder hackle, which may be full; wings, the glossiest, deepest black, with a sprinkling of peacock harl.

Captain Lacy recommends the *Cock-of-the-Walk*.—A black fly with jungle cock feathers in the wings (a little white and yellow in the wings) silver body, no hackle.

A third fly is the *Smoky dun*. One colour all over, smoky and dun ; wings and body the same, with a tag and three turns of silver twist ; tail, peacock's black feather.

The two following spinning flies are recommended :—

A Halcyon or Alexandra spinner, $1\frac{1}{2}$ inch, mounted with a Mahseer treble, and dressed dark with a lot of peacock harl. Hardy's spinning fly No. 1 with Blackamoor dressing.

Floating flies for dry fly-fishing have upright, divided wings, and more hackle than wet flies ; the hackles cause the fly to float, not the wings.

Fish with one fly. Fish wet. No striking is needed ; the Mahseer hooks himself ; but hold him hard.

Throw the fly with a straight line, across and down stream ; keep the line taut ; draw the fly slowly and steadily ; let it swim with the stream, and sink a little.

In still water work the fly by little jerks, followed by short pauses, by slowly raising and lowering the point of the rod ; the feathers will shut and open, and give the fly a life-like appearance.

In *casting the fly*, the rod does much more than the arm. Practice will develop the muscles of the wrist, and combine them into those quick automatic movements required for casting. The gut must first have been soaked in water. There are four ways of casting the fly :—

1. *Overhead cast* : Draw eight yards of line off the reel, and get it in front of you. By a quick movement of the wrist, give a jerk to the point of the rod and chuck the line behind you. Pause a second, enough time to let the line get straight, but not long enough to let the fly touch the ground ; then throw the line forward without any jerking. The fly should touch the water first. If the pause between the backward and forward casts be too short, the gut collar will smack like a whip, and the fly may crack off.

2. *Steeple cast* : When making the backward cast, send the line high up in the air, and make the forward cast as above. A very long line can be got out in that way, and it is not likely to catch behind.

3. *Underhand cast*: It is very much like the overhead cast, the only difference being that instead of the rod being kept upright it is held in a horizontal position. It can be done only when the ground behind is flat and clear. This cast causes the fly to cock, and the rod is not seen by the fish.

4. *Switch (Spey) cast*: Useful when the line cannot go behind owing to trees or a high bank. One must be fishing down stream at the time. Let the rod and line point straight towards the fly. Now raise the point of the rod smartly and the line will come off the water; depress it a little, and the fly will be near your feet; switch the rod forward sharply, the line will follow round in a curve, will leave the water, and will roll out down stream in front.

Artificial flies can be kept safe from insects by camphor, Keating's insect powder, naphthaline or corrosive sublimate. If insects are already present, kill them with vapour of benzene. The fly book should be kept in a tin box.

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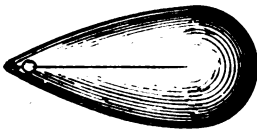
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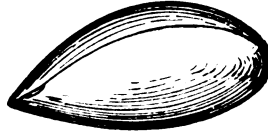
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FIG. 1.



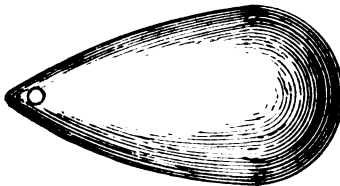
Scott's No. 2 Spoon.

FIG. 2.



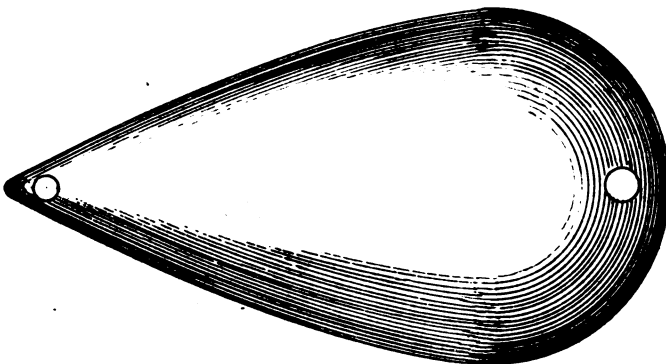
Hog-backed or Haggd Spoon

FIG. 3.



Shape and size of Spoon recommended for the Poonch.

FIG. 4.



**Exact shape and size of Spoon recommended for large
Mahseer at Tangrot.**

FIG. 1.

Small Spoon with Flying Mount
of Single Hooks.

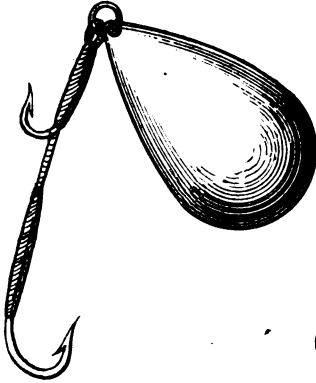


FIG. 2.

Small Spoon with Flying Mount
of Treble Hooks.

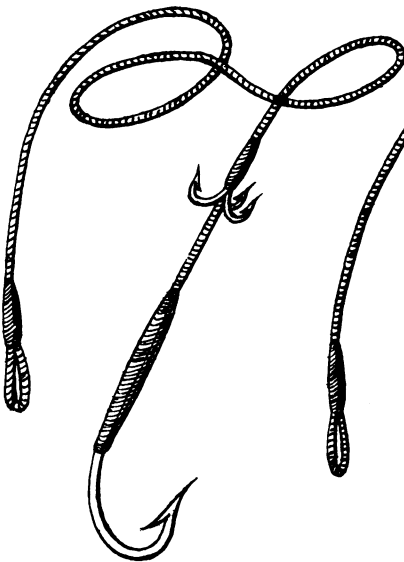
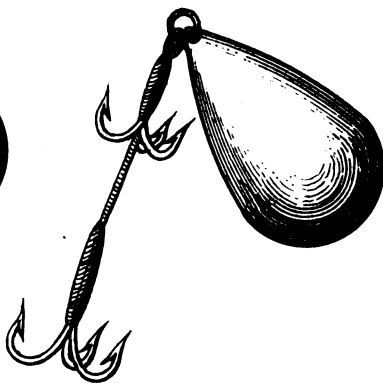


FIG. 3.

Mount for Chliwa or other
small fish.

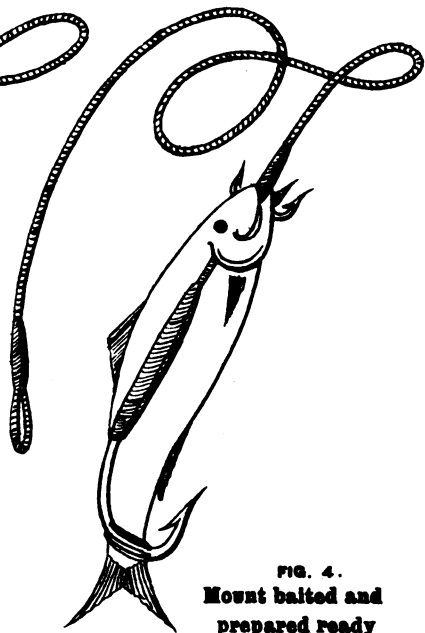


FIG. 4.

Mount baited and
prepared ready
for Spinning.

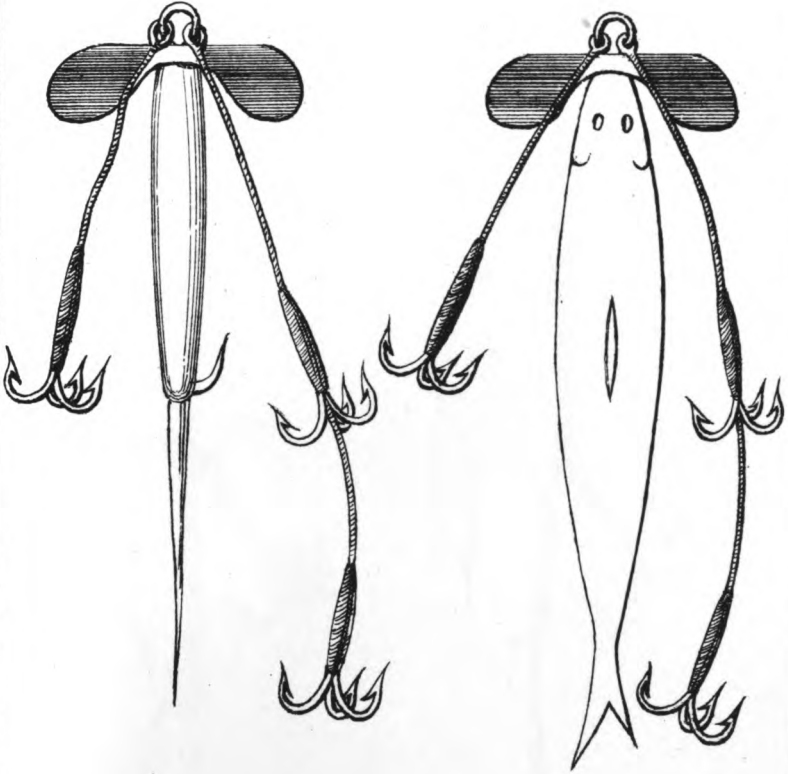
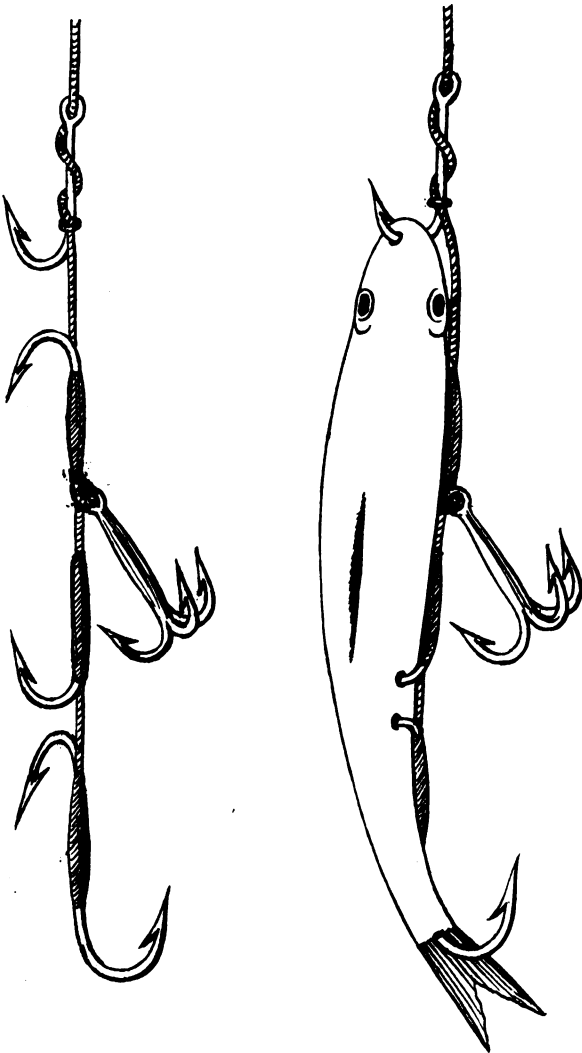


FIG 1

Diagrams of Spinner described in Chapter I, called the
"Chapman's" Spinner, showing the same baited and unbaited.

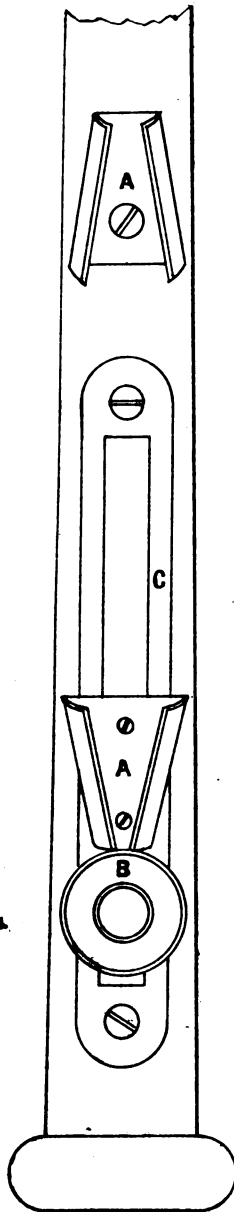


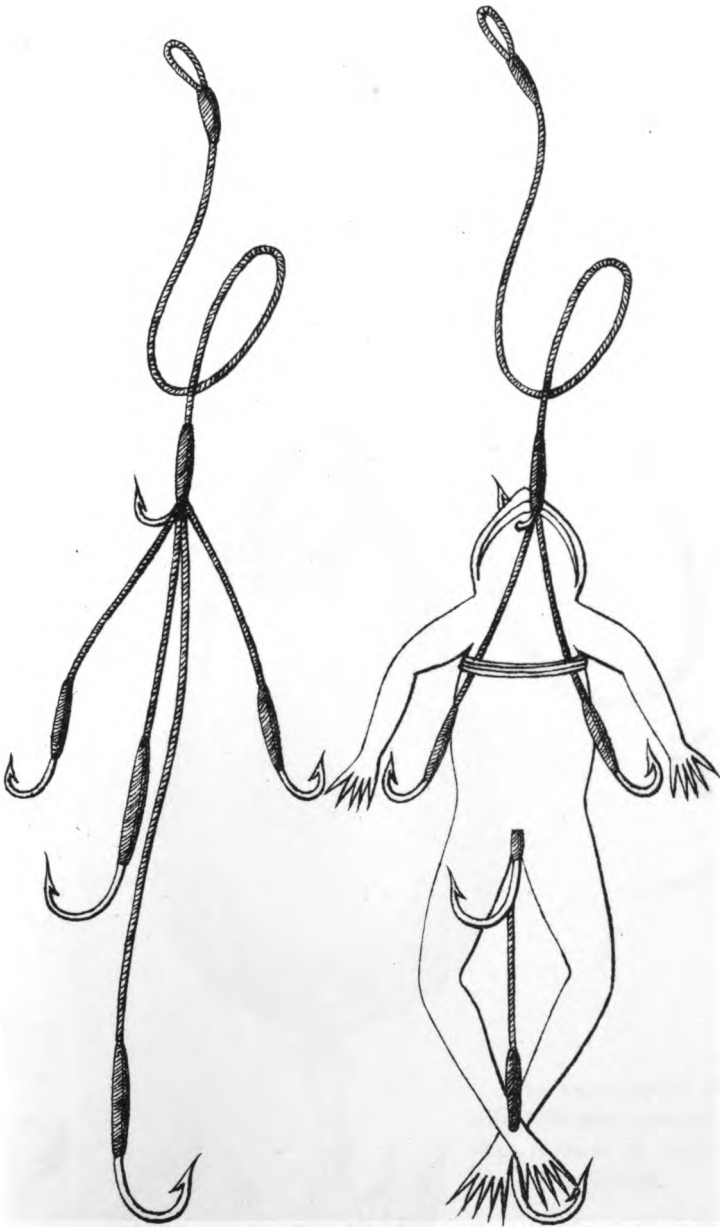
The "Francis" Flight,
baited and unbaited.



Pennell-Bromley Flight.
The lowest triangle may be left out for Mahseer.

Weeger Winch Fitting
AA—Tapered Sockets.
B Screw.
C Slide.



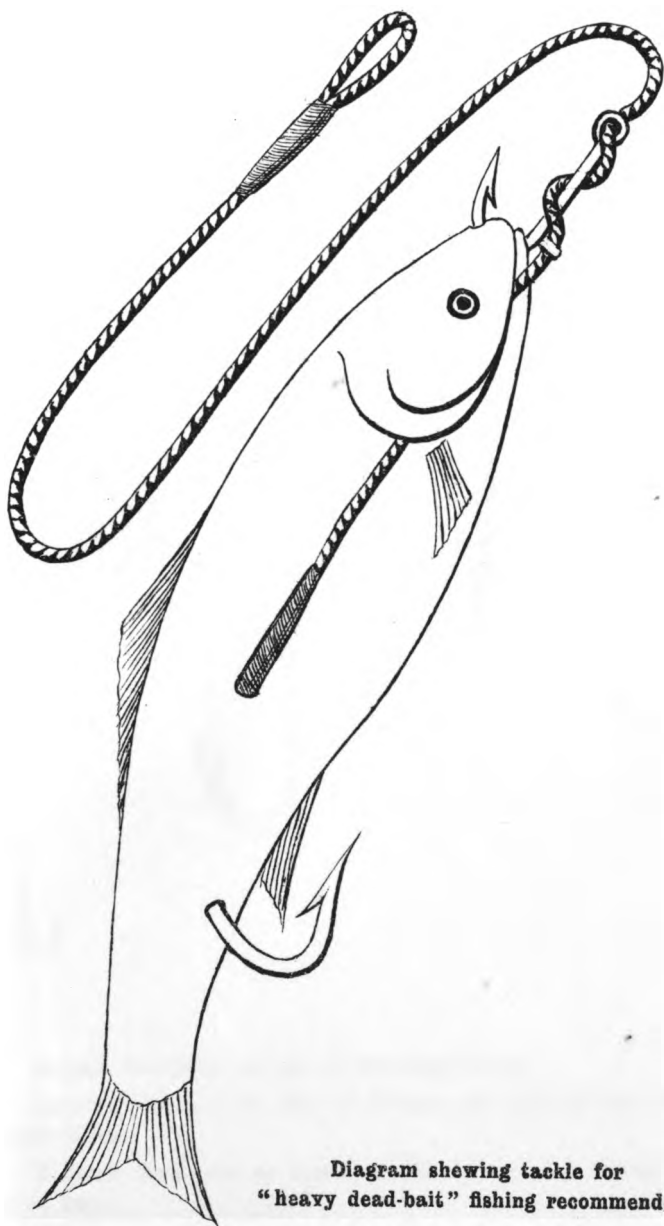


Frog Tackle, baited and unbaited.

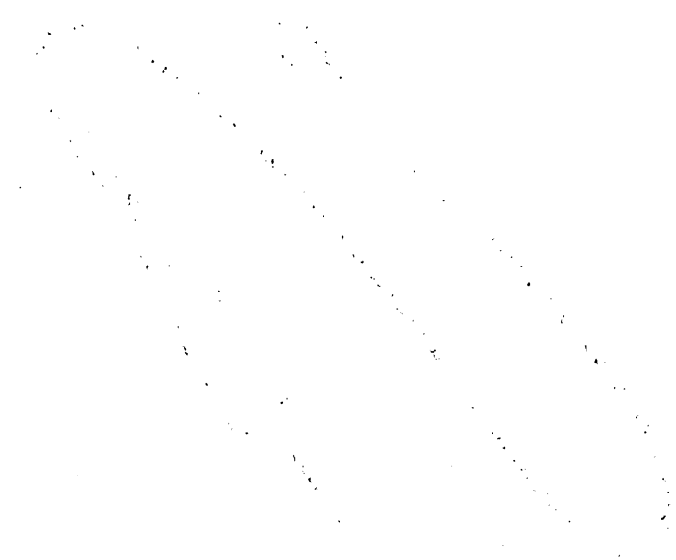
Lith. & Printed by W. Newman & Co., Calcutta.

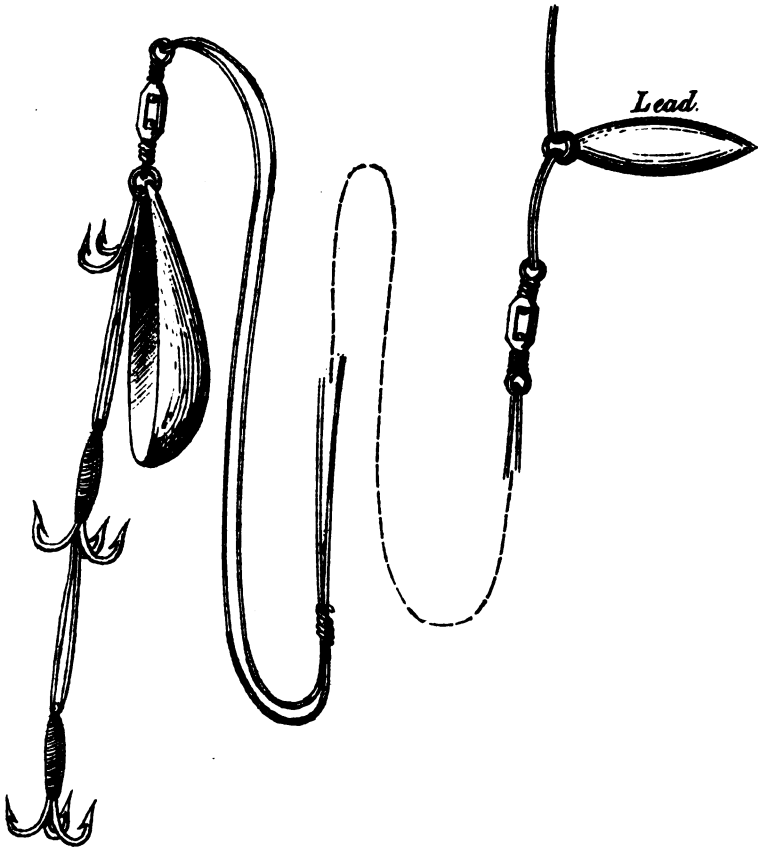


**Diagram shewing Spoon
with Triangles mounted with
wire, instead of split-rings
for heavy fishing.**



**Diagram shewing tackle for
“heavy dead-bait” fishing recommended.**



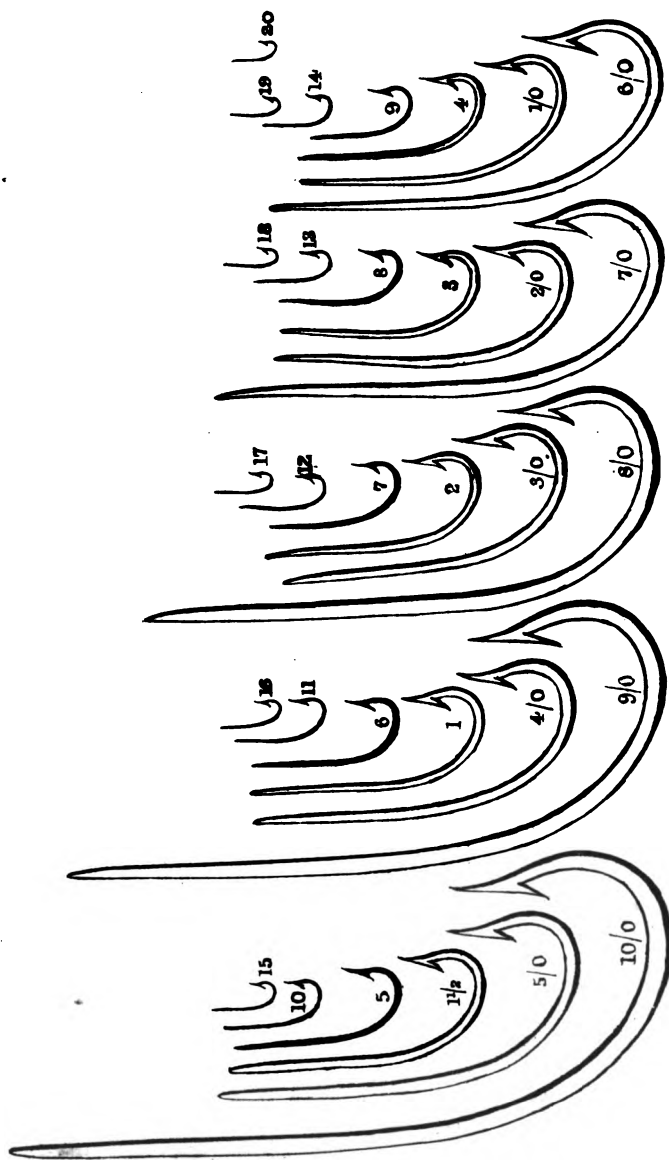


Captain Maycock's method of mounting spoons.

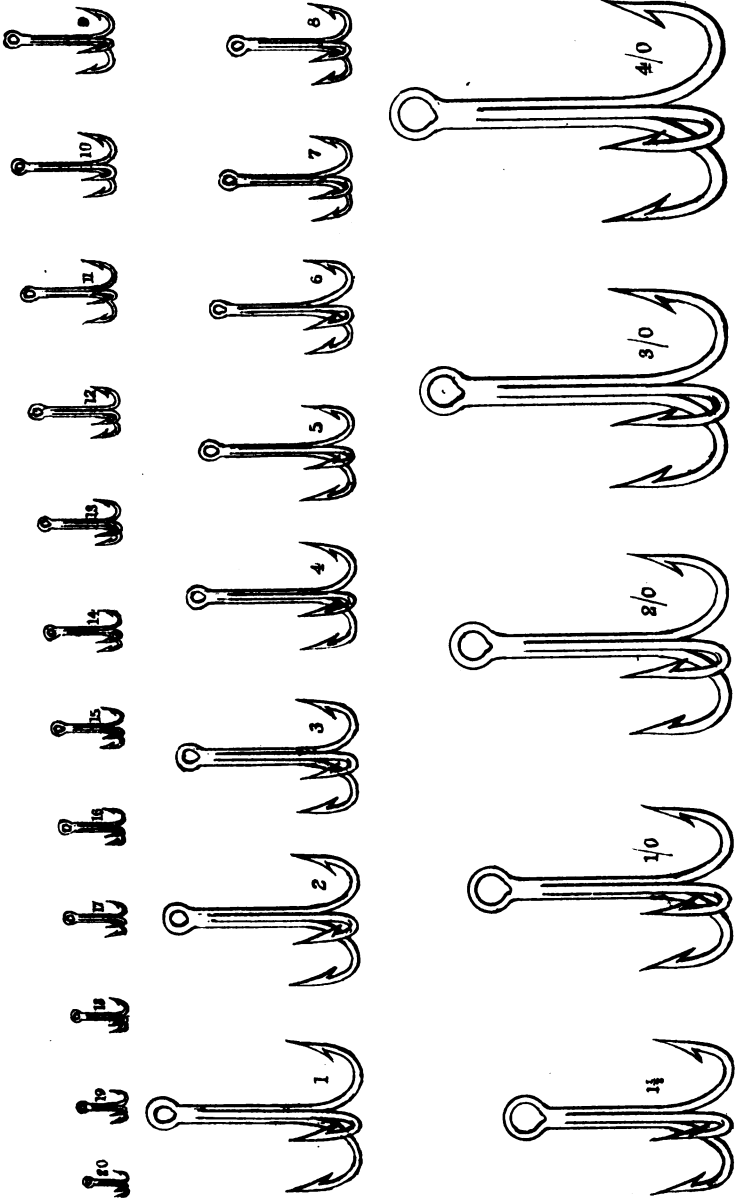
Spinning trace, 2 strands of Salmon gut side by side—Total length 3 feet.

Distance from end of spoon to end triangle $2\frac{1}{4}$ inches Lead $\frac{1}{2}$ ounce.

...the ... of ...
 ... the ... of ...
 ... the ... of ...
 ... the ... of ...



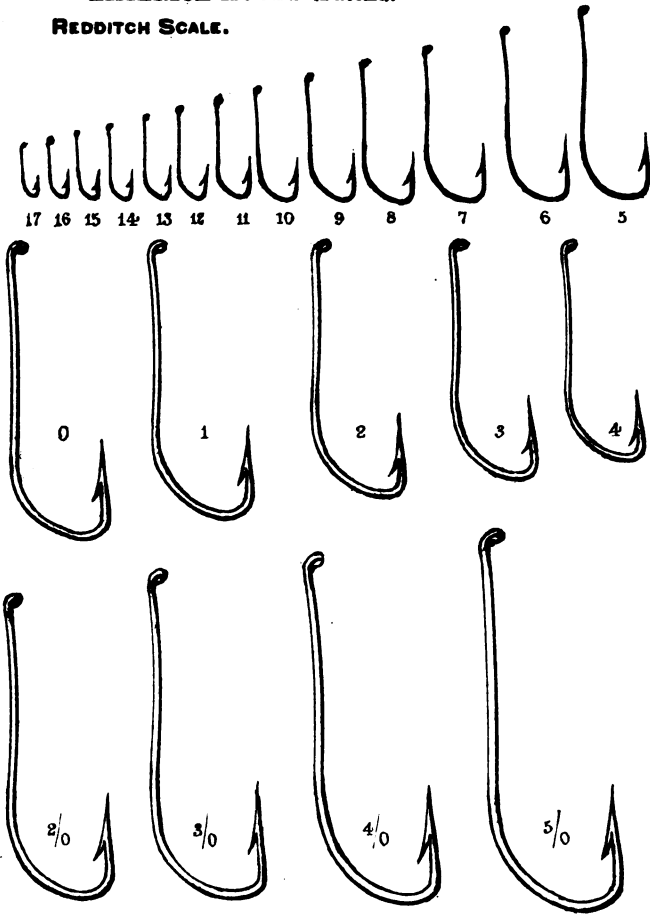
Scale of LIMERICK HOOKS according to Thomas' numbering.



Scale of TREBLE HOOKS according to Thomas' numbering.

**PENNELL-UP-TURN SHANK TURN-DOWN EYED
LIMBERICK HOOKS (Patent).**

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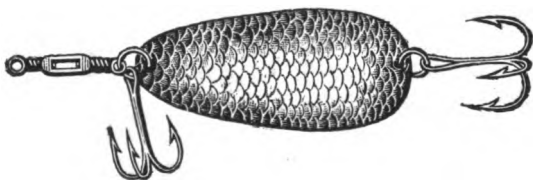
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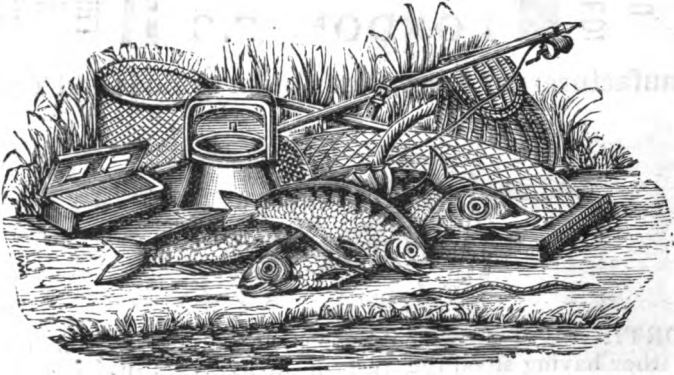
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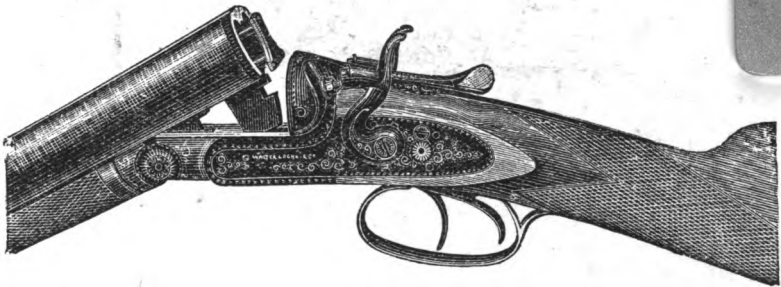
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